

## Psychology is From Mars, Sexology is From Venus: Can They Meet on Earth?

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### Abstract

Mainstream psychologists have not pursued sexology with the enthusiasm aimed at other areas of psychological research. Ambivalence is evident in the ideological marginalization of sexology by mainstream psychology. The authors argue that scientific conflicts between the disciplines in part reflect divergent interpretations of how each discipline approaches the scientific method. By aligning psychology with positivism and sexology with postpositivism, a discussion of cultural, scientific, and normative conflicts between the two disciplines is presented as evidence for these differences in scientific ideology. To address these conflicts, future directions for scientific progress are proposed for sexology and psychology. Specifically, by capitalizing on the strengths of each discipline, collaboration can lead to the validation of sexology as a science and the enhancement of both disciplines.

Despite the fact that the majority of North American sexologists are psychologists or have significant psychological training, there is growing ambivalence between mainstream psychology and sexology. Sex is a basic public and human concern, yet this is not reflected in psychology. This ambivalence is reflected in a variety of ways. For example, introducto-

ry psychology textbooks spend approximately four times the amount of space discussing sensation and perception than they spend on sex and gender (Koenig, Daly, Griggs, Marek, & Christopher, 2004). There are far more graduate training opportunities in psychology departments for the study of depression than for the study of sexual disorders. This is surprising considering the high prevalence of sexual dysfunction compared to that of depression (Canadian Psychiatric Association, 2001; Laumann, Paik, & Rosen, 1999). Although there are notable societal deterrents to the study of sexology, which have no doubt discouraged many psychologists, we argue that marginalization of sexology by mainstream psychology can be understood in terms of how each discipline pursues scientific knowledge. The aim of this discussion is to offer insight into how and why sexology has become estranged from mainstream psychology, and what sexologists can do to correct this ideological schism.

Psychology is generically defined as the study of mind and behaviour, and mainstream psychology can be defined in any number of ways depending on what is measured and how those measurements are interpreted. Extraordinary personalities such as William James and Wilhelm Wundt laid the foundations for modern psychology; however, this discussion will focus on how psychology has matured as a science. For these reasons we choose to align mainstream psychology within the framework of empirical science, specifically positivism. In its current form, positivism relies on the generation of falsifiable hypotheses, direct observations, operational constructs, generalizability of causal relationships through theory, and experimental replication with the aim of uncovering the universal truth about a thing (Kuhn, 1962; Popper, 1963). The positivist foundations of modern psychology are rooted in Descartes' emphasis on empirically based knowledge and the Kantian tradition of a priori logic (McLaren, 1999). G. T. Fechner established the foundations of quantitative psychology in the late 19th century (Fechner, 1887/1987), and shortly thereafter Edward Thorndike further adapted empirical science to psychology by arguing for the statistical analysis of reliable, quantitative measurements (Thorndike, 1904). Mainstream psychology has since evolved in the tradi-

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tion of a “quantitative imperative” (Michell, 1990). Critics have even suggested that psychology emphasizes factual information at the expense of scientific development (Machado, Lourenço, & Silva, 2000).

The scientific divide between the positivist ideals of psychology and the value-laden science of sexuality has reinforced the differences between these two disciplines. Although popular culture often associates sexology with the empirical approach of Alfred Kinsey (Bullough, 1998), the formal discipline of sexology was first articulated by Iwan Bloch as an integration of social, literary, philosophical, biological, and, above all, medical disciplines (Bloch, 1926; Money, 1978). Similarly, modern sexology promotes a view of sexuality that, by definition, is influenced by psychological, social, cultural, and biological factors (Weis, 1998). Today, this multidisciplinary approach is effectuated by the handful of private organizations, universities, and medical institutions that offer highly specialized sexological training throughout North America, Europe, and Australia. Accordingly, sexology attracts a diverse collection of health professionals, including physicians, sex therapists, psychologists, and other specialists (McLaren, 1999).

It is clear that the early science of sexology reflected a postpositivist bias, wherein science is inextricably linked to sociocultural context (Munck, 1999; Reiss, 1993). Postpositivism integrates empirical evidence with historical, comparative, and philosophical interpretations to form a “value-aware” explanation of observations (Reiss). The influential sexologist Foucault demonstrates this postpositivism by arguing that power shapes sexual knowledge so that truth cannot exist apart from social context (Foucault, 1978). The practical value of postpositivist sexology is its capacity to provide comprehensive knowledge of sexuality, beyond the observable sexual behaviour admitted under strict positivist science. Because sexology also relies on the unobservable meanings of sexual behavior, pure positivism limits the type of information available from studying human sexual behavior.

In the spirit of Foucault, speculations about the birth of sexology are united by a theme of social control embedded within historical context. Just as Krafft-Ebing and other 19th-century German scientists sought to understand socially peripheral sexual behaviour, the aims of early governmental agencies, such as the National Research Council’s Committee for Research in Problems of Sex led by psychologist Calvin Stone, were geared towards gathering information to shape the public education of sexuality (Bullough, 1998; Pickren, 1997). In sum, sociocultural foundations predisposed the development of sexology. The postpositivist origins of sexology illustrate the

difficulty (and wisdom?) in separating sexuality from a normative context.

In spite of the differences in scientific evaluation, psychology and sexology are bound by core principles. Many of these similarities are beyond the scope of this article; nonetheless, we will briefly address a general and incomplete set of shared principles. Both disciplines use empirical research as a foundation of knowledge, although the interpretation of sex research is considerably more flexible. Sexology addresses the psychological experience of individuals in sexual contexts, as well as the social psychology between sexual partners. Both sciences struggle to explain the mind-body connection, a problem currently confronting both human sexual psychophysiology, as well as research into the psychological underpinnings of stress. The mind-body problem is also evident in how these disciplines continue to evolve. In line with the 20th-century obsession with reductionism, psychology and sexology are increasingly adopting a more biologically oriented focus (Bergner, 2004; Winton, 2001).

Despite such fundamental similarities, a tension between mainstream psychology and sexology has prevented their synthesis and has led to a marginalization of sexology. Differences in scientific methodology may play an important role in this tension. Positivist ideals deny the value of context, whereas postpositivism treats context and empirical evidence as equally important pieces of a whole. These disparate perspectives on the pursuit of science result in three domains of conflict: culture, science, and normalcy.

### Culture

The cultural divide between mainstream psychology and sexology may seem intuitive because the contextual components of sexuality violate the positivist ideals of psychology. Various writers have commented on the dynamic interaction of culture and sexology, wherein sex research shapes how people perceive and act on sexuality (Lützen, 1994; Munck, 1999). For instance, the Kinsey reports may have altered public perceptions of sex by normalizing a variety of traditionally “taboo” sexual practices, such as masturbation and homosexual fantasies. In sum, the cultural context of sexology impacts how it is perceived and how it shapes public perceptions of sexuality.

Psychological purists seek to minimize culture and focus on fact-finding. They attempt to control for confounding contextual variables in order to observe the underlying nature of the dependent variables of interest (Machado et al., 2000). Experimental control is evident in many areas of psychology. Social psychologists infer motivation with incentive tasks, cognitive

psychologists measure interpretation bias as a function of response time, and experimental psychologists record motor movements to monitor procedural memory. In all of these cases, the experimental aim is to isolate a psychological construct and monitor its nature using accurate, objective measurements. Psychologists assume that the removal of contextual factors will uncover the construct itself. This assumption embodies the positivist ideal.

#### Science

Contextual bias shapes how sexology is pursued as a science. The inevitable conflict between positivism in mainstream psychology and postpositivism in sexology reflects this inherent bias. Some sexologists, such as Alfred Kinsey, William Masters, and Virginia Johnson, have gravitated toward an empirical model of sexuality by operationally defining sexual response as physiological phenomena. A dominant feature of sexology, however, is the awareness of sexual norms, and this awareness cannot be teased apart from the scientific evaluation of sexuality (Mosher, 1989). Sexual norms can have a powerful effect on how sexual science is perceived, particularly when sexuality has negative religiocultural connotations. For these reasons sexology may seem aversive to the positivist, who is interested in a specific psychological fact rather than the relationship between psychology, visceral physiological processes, and the environment.

A series of letters exchanged between Ira Reiss and Albert Ellis, two influential figures in the history of sexology, demonstrate the fusion of values and science in sexology. A debate on whether unaffectionate sex is a natural sexual impulse vacillates between Ellis, who contends that casual sex is beneficial and natural for men, and Reiss, who argues that casual sex impairs man's capacity for intimate sexuality (Reiss & Ellis, 2002). The argument dissolves into a cost/benefit analysis of casual sex and illustrates how different interpretations of an observation – men engaging in casual sex – can affect the description of the observation.

The emphasis on context in sexology may explain why sexology lacks a strong theoretical history (Weis, 1998), which is a defining feature of positivist sciences such as psychology. Bloch's original vision of a multidisciplinary sexology approach freely combined the qualitative sexual information from literature and philosophy with the quantitative sexual information from biology and medicine. This vague definition of sexology may have prevented subsequent theoretical growth because sexology combines such diverse empirical and phenomenological evidence. Indeed, little theoretical consistency has linked early sexology with the

sexologists of today (Money, 1978). Leonore Tiefer has argued for a postpositivist sexology in which biases of psychologists are as equally important in understanding sex research as raw participant data (Tiefer, 1994). This atheoretical perspective is an extreme example of postpositivist sexology.

#### Normalcy

The conflict between the scientific approaches of psychology and sexology calls standard models of normalcy into question. The definition of "normal" sexuality is quantified by science and elaborated by culture. Munck (1999) argues that normalcy is an ever-evolving existential state that cannot be teased apart from time, place, and context. Tiefer (1994) reinforces the negligible value of "normal" sexuality because it assumes the existence of a universal sexuality rooted in a Platonic reality. Culture has a profound impact on what is seen as sexually normal (Lützen, 1994). The conflicting perspectives of the two sexologist giants Krafft-Ebing and Bloch illustrate the power of context in science. Krafft-Ebing assumed that sexual perversions were expressions of pathology, whereas Bloch viewed sexual perversions as behavioural extremes of the normal sexual impulses (Money, 1978). The definition of sexual perversion, whether pathological or an extreme state, has profound implications for how such behavior is studied and "treated" (McLaren, 1999). The description of sexual behaviour is usually accompanied by some normative label defining what is normal and therefore, acceptable.

Traditional theories of "normal" sexuality have been criticized because they may exhibit biases masked as positivist fact. Feminist criticism of sexology has long focused on the male-biased, heterosexual models of sexuality in which the female of the species is a receptive, passive partner during sex (Tiefer, 1994). Comparative evidence of hormone-regulated female sexual initiation in primates and humans has since supported this criticism (Wallen, 1996). The substantial biological advances in male sexuality, particularly the advent of Viagra, have failed to elucidate female sexual function and therefore cannot describe universal human sexuality (Winton, 2001). Gender biases were even present in Kinsey's early sexual taxonomy, which did not reflect gender differences in psychology (Bullough, 1998). Conventional definitions of "normal" sexuality are therefore doubly rejected by postpositivist sexologists, as they are a) based on limiting assumptions that do not account for other potential explanations of sexual behaviour and b) intolerant of qualifying, subjective contexts.

### Implications for Sexology and Psychology

The cultural, scientific, and normative tension between sexology and mainstream psychology has resulted in unfortunate disadvantages for both disciplines. Sexology has not fully profited from the major psychological theories that can provide a valuable theoretical backbone to sex research. The application of cognitive psychology to sexuality, for instance, is relatively recent and has resulted in beneficial insight for sex researchers and therapists alike (Geer & Manguno-Mire, 1996). The field of biopsychology has provided valuable information on the neural correlates of sexual response with fMRI (e.g., Komisaruk et al., 2004). Due to the poor development of psychometric theory in sexology, there are few valid measurements of very basic sexual concepts. No one attempted to design a psychometrically sound index of the orgasmic experience before Mah and Binik (2002). Similarly, a quality index of male sexual function did not exist before Pfizer developed the International Index of Erectile Function for Viagra's clinical trials (Rosen et al., 1997).

In the same vein, therapeutic techniques specific to sexology are set apart from traditional psychological approaches. Sex therapy, for example, is not viewed as a therapeutic milieu that rivals cognitive behavioral therapy or psychoanalysis. Few types of sex therapy meet the APA's (1995) requirements for an empirically validated treatment. Consequently, sex therapy is viewed as a less legitimate form of treatment.

The unfortunate disadvantages arising from the ambivalence between mainstream psychology and sexology point to the necessity of a dialogue between the disciplines. An ideological meeting of minds can enable both disciplines to learn valuable lessons from each other. It is not necessary to cling to a positivist extreme, nor is it necessary to embrace extreme contextualism. By articulating how these disciplines can improve the weaknesses in one another, a mutual respect may develop between psychology and sexology.

For psychology, this means expanding the appreciation for contextual information. Psychology is said to be suffering from an undue emphasis on current knowledge, such that recent research and theory are valued above the evolution of psychological knowledge (Macado et al., 2000). Sexology has managed to maintain awareness of its history of past sexological advances, such as those driven by Kinsey. Furthermore, mainstream psychology may de-emphasize the interaction between experimental evidence and other levels of cultural analysis. Sternberg (2004) has recently explored the lack of unification between biology and context in psychology, and this issue con-

trasts starkly with the lively debates in sexology about potential biopsychosocial models of sexuality (Winton, 2001). Finally, mainstream psychology can benefit from the increased integration of qualitative and experimental analysis. Sexologists have long embraced the use of qualitative data to offer scientific insight. Kinsey, for example, believed that personal interviews were the ideal means of studying sexual phenomena and much of his research was based on these qualitative methods. Contextual analysis maximizes the information one can gather and apply toward scientific knowledge rather than compromising the quality of science.

Conversely, sexology may benefit from adhering more closely to positivist principles of research, as is seen in mainstream psychology. The improvement of basic experimental methodology in sex research may enable sexologists to better understand sexuality. Such improvements include less biased sampling techniques, larger sample sizes, attention to potential confounding variables, and use of valid and reliable indices. All sexologists, whether they are involved in research or in practice, can benefit from critically appraising current sexual knowledge and generating novel directions to improve and direct future sex research. Use of the scientist-practitioner model can maximize the benefits of strong research methodology by encouraging ecologically valid sex research. A sexologist who tests and applies sexual information will benefit in two ways: therapy will be informed by empirically supported evidence and research can be adapted to fit observations gathered from sex therapy. A firm knowledge of psychology can aid sexologists in these endeavours (Weis, 1998).

We have argued that the uneasy relationship between mainstream psychology and sexology partially reflects divergent interpretations of scientific methodology. The cultivation of a dialogue between the two disciplines may promote a mutual appreciation of positivist and contextual science, thereby furthering the progress of both psychology and sexology. A successful model of this dialogue can be found in Canada, in which a substantial number of psychology departments include sexological training. We have been unable to compile an exhaustive list but we are aware of such training at Brock University, Concordia University, McGill University, Queen's University, Simon Fraser University, University of British Columbia, University of Guelph, University of Montréal, University of New Brunswick, University of Québec at Montréal, University of Ottawa, and University of Western Ontario. Other public institutions such as the former Clark Institute associated with the Department of Psychiatry of the University of

Toronto or the federal penitentiary system in Kingston are renowned for their contributions to sex research and practice. Based on the current membership for the International Academy of Sex Research, the ratio of Canadian sexologists to American sexologists is twice the population ratio between the two countries. The striking prevalence of Canadian sexologists is unparalleled in the world with the possible exception of the Netherlands.

If psychology is from Mars and sexology is from Venus, then diplomacy between these two disciplines must be pursued. Canadian institutions have laid the foundation for this dialogue to progress.

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### Résumé

Les psychologues de l'école dominante n'ont pas montré autant d'enthousiasme envers les études en sexologie qu'envers d'autres champs de recherche en psychologie. Nous constatons une ambivalence patente dans la marginalisation idéologique par la psychologie dominante. Les auteurs soutiennent que des conflits d'ordre scientifique entre les disciplines expriment en partie des interprétations divergentes de la façon dont chaque discipline conçoit la méthode scientifique. Après avoir mis en correspondance la psychologie avec le positivisme et la sexologie avec le post-positivisme, les auteurs du présent article discutent des conflits d'ordre culturel, scientifique et normatif qui partagent les deux disciplines; cette discussion est présentée comme preuve de ces différences vues sous l'angle de l'idéologie scientifique. Pour régler ces conflits, les auteurs proposent des orientations futures au progrès scientifique en ce qui a trait à la sexologie et la psychologie. Plus précisément, si elle mise sur les forces de chacune des disciplines, la collaboration peut conduire à la validation de la sexologie en tant que science et à l'enrichissement des deux disciplines.

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### References

- Bergner, R. M. (2004). Is it all really biological? *Journal of Theoretical & Philosophical Psychology*, 24, 30-49.
- Bloch, I. (1926). *The sexual life of our time: Its relations to the modern civilization*. New York: Allied Book Company.
- Bullough, V. L. (1998). Alfred Kinsey and the Kinsey Report: Historical overview and lasting contributions. *Journal of Sex Research*, 35, 127-131.
- Canadian Psychiatric Association. (2001). Canadian clinical practice guidelines for the treatment of depressive disorders. *Canadian Journal of Psychiatry*, 46(Suppl 1), 13S-20S.
- Di Mauro, D. (2003). Current trends and future directions in sexuality research and training. In D. di Mauro, G. Herdt, & R. Parker (Eds.), *Handbook of sexuality research training initiatives*. New York: Social Science Research Council.
- Fechner, G. T. (1987). My own viewpoint on mental measurement. *Psychological Research*, 49, 203-207. (Original work published 1887)
- Foucault, M. (1978). *The history of sexuality* (R. Hurley, Trans.). New York: Vintage Books.
- Geer, J. H., & Manguno-Mire, G. M. (1996). Gender differences in cognitive processes in sexuality. *Annual Review of Sex Research*, 7, 90-125.
- Heiman, J. R., & Meston, C. M. (1998). Empirically validated treatments for sexual dysfunction. In K. S. Dobson & K. D. Craig (Eds.), *Empirically supported therapies: Best practice in professional psychology* (pp. 259-303). New York: Sage Publications.
- Koenig, C. S., Daly, D. K., Griggs, R. A., Marek, P., & Christopher, A. N. (2004). *A compendium of introductory psychology textbooks, 2001-2004*. Retrieved October 9, 2004, from Office of Teaching Resources, Society for the Teaching of Psychology, APA website: <http://www.lemoyne.edu/OTRP/introtxts.html>
- Komisaruk, B. R., Whipple, B., Crawford, A., Grimes, S., Liu, W. C., Kalin, A., et al. (2004). Brain activation during vaginocervical self-stimulation and orgasm in women with complete spinal cord injury. *Brain Research*, 1024, 77-88.
- Kuhn, T. S. (1962). *The structure of scientific revolutions*. Chicago, IL: University of Chicago Press.
- Laumann, E. O., Paik, A., & Rosen, R. C. (1999). Sexual dysfunction in the United States: Prevalence and predictors. *JAMA*, 281, 537-544.
- Lützen, K. (1994). How sex was born: Cultural history of sexology, 1870-1930. *Nordisk Sexologie*, 12, 184-190.
- Machado, A., Lourenço, O., & Silva, F. J. (2000). Facts, concepts, and theories: The shape of psychology's epistemic triangle. *Behavior and Philosophy*, 28, 1-40.
- Mah, K., & Binik, Y. M. (2002). Do all orgasms feel alike? Evaluating a two-dimensional model of the orgasm experience across gender and sexual context. *Journal of Sex Research*, 39, 104-113.
- McLaren, A. (1999). *Twentieth-century sexuality: A history*. Oxford: Blackwell Publishers.
- Michell, J. (1990). *An introduction to the logic of psychological measurement*. Hillsdale, NJ: Erlbaum.
- Money, J. (1978). *Handbook of sexology: History and ideology*. New York: Elsevier.
- Mosher, D. L. (1989). Advancing sexual science. *Journal of Sex Research*, 26, 1-14.

- Munck, E. (1999). Ethics of sexuality – Ethics of sexology. *Scandinavian Journal of Sexology*, 2, 195-201.
- Pickren, W. (1997). Robert Yerkes, Calvin Stone, and the beginning of programmatic sex research by psychologists, 1921-1930. *American Journal of Psychology*, 110, 603-619.
- Popper, K. R. (1963). *Conjectures and refutations: The growth of scientific knowledge*. London: Routledge and K. Paul.
- Reiss, I. L. (1993). The future of sex research and the meaning of science. *Journal of Sex Research*, 30, 3-11.
- Reiss, I. L., & Ellis, A. (2002). *At the dawn of the sexual revolution: Reflections on a dialogue*. Walnut Creek: Altamira Press.
- Rosen, R. C., Riley, A., Wagner, G., Osterloh, I. H., Kirkpatrick, J., & Mishra, A. (1997). The International Index of Erectile Function (IIEF): A multidimensional scale for assessment of erectile dysfunction. *Urology*, 49, 822-830.
- Sternberg, R. J. (2004). The role of biological and environmental contexts in the integration of psychology: A reply to Posner and Rothbart. *Canadian Psychology*, 45, 279-283.
- Thorndike, E. L. (1904). *An introduction to the theory of mental and social measurements*. New York: Science Press.
- Tiefer, L. (1994). The social construction and social effects of sex research: The sexological model of sexuality. In C. B. Travis & J. W. White (Eds.), *Sexuality, society, and feminism*. Washington, DC: American Psychological Association.
- Wallen, K. (1996). Nature needs nurture: The interaction of hormonal and social influences on the development of behavioral sex differences in rhesus monkeys. *Hormones & Behavior*, 30, 364-378.
- Weis, D. L. (1998). The use of theory in sexuality research. *Journal of Sex Research*, 35, 1-9.
- Winton, M. A. (2001). Paradigm change and female sexual dysfunctions: An analysis of sexology journals. *Canadian Journal of Human Sexuality*, 10, 19-23.