A Social Critique of Fertilization Research

Fertilization stories often reflect the social mores (and anxieties) of their times. One developmental biology book from 1972 states, "In all systems that we have considered, maleness means mastery, the Y-chromosome over the X, the medulla over the cortex, androgen over estrogen. So physiologically speaking, there is no justification for believing in the equality of the sexes." (See Spanier, 1984; this paragraph and others like it are not to be found in the 1982 revision of this book.) The sperm and the egg are often surrogates for men and women, respectively, in the analogy man:woman = sperm:egg. (They are, after all, *gametes*, i.e. marriage partners; from the Greek, *gamos*, marriage). In the 1800s, the sperm was the egg's suitor. Later, the sperm and the egg are depicted as characters in a self-congratulatory hero myth. The "Sleeping Beauty" version of the egg is also discussed (where the passive egg is awakened by the sperm's kiss), as is the "rape" of the egg by sperm.

Other stories have been told about sperm and egg, and they, too reflect contemporary social mores and anxieties. One article, "Sperm Wars" (Small 1991), appeared in a popular science journal, and depicts sperm as the ultimate warriors in the never-ending battle against the egg, other sperm, and, ultimately, against female promiscuity. Sperm are described as "tactically smart," "well-armed," and as "a formidable .00024-inch weapon, tipped with a chemical warhead"! It is basically a re-telling of the Helen of Troy story, where the egg is an alluring princess attracting, and at the same time repelling, sperm. Indeed, according to this story, the reason males launch so many sperm is the same reason Helen "launched a thousand ships" (female infidelity). Storytelling is a major component of scientific communication. The stories need to be told carefully and scientists need to be aware of their metaphors.

Literature Cited

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