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On the Masculine Genius

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Many attempts have been made to define the feminine, and more recently, the masculine genius. Naturally, this is difficult enough in the contemporary context, so fraught is it with the dualism between the body and the spirit. By contrast, if we begin by looking at the human organism as a whole, we can actually study the physical body and find in it a deeper meaning since “the body and the body alone ... makes visible the invisible,” as John Paul II said.

We can link the basic paradigm for the masculine and feminine genius to the phenomenon of new life. The human contribution to procreation and gestation of new life necessitates a mother and a father. These human contributions are distinct, while equal in dignity, individually necessary and irreplaceable.

In the act of procreation, the man is pointed out of himself and the woman is focused within. It is within the body of the woman that both procreation and gestation take place, and it is “inwardness” that can help define the feminine genius. As the new person comes to existence within her body, a woman is wholly focused on this new person with all of her being. The developing baby consumes her attention from within.

A man is not as concerned about what is happening moment by moment with the developing child because it is not happening inside his body. Instead, his outward focus means that he is free to participate in the new life by ensuring the environment *outside and around the child* is safe. While a woman’s body is fine tuned for human connection, the man’s body is made for provision and protection. *A woman’s body is made to make human bodies inside of her and a man’s body is made to make human bodies outside of him.* The woman serves the child in proximity, while a man serves the child from a distance.

On the basis of these essential, mutually distinct and complementary differences, we can find a “genius” relative to each.

Just a word on the concept of “genius.” Many discussions of the feminine or masculine “geniuses” open themselves up to anecdotal rebuttals about particular men or women who defy the characterization. Here we do not define “genius” as something *essential* to each of the sexes, such as capacity for motherhood or fatherhood, but, rather as: “a set of characteristics, and proclivities that derive from those essential and mutually distinct capacities.” The feminine genius, therefore, is the set of characteristics that a well-formed woman will display with a particular proclivity due to her capacity for motherhood. The masculine genius is the set of characteristics that a well-formed man will display

with a particular proclivity due to his capacity for fatherhood.

As Cardinal Ratzinger wrote in his *Letter to Bishops of the Catholic Church on the Collaboration of Men and Women in the Church and the World*,

It is appropriate ... to recall that the feminine values mentioned here [a capacity for the other] are above all human values: the human condition of man and woman created in the image of God is one and indivisible. It is only because women are more immediately attuned to these values that they are the reminder and the privileged sign of such values.

The same could be said for the masculine genius, which is a set of characteristics that are ultimately human values, attainable also by women. The integration of both sets of human values leads to human flourishing, beautifully exemplified by the father of St. Thérèse of Lisieux, described by her thus: “Hard as he was on himself, he was always affectionate towards us. His heart was exceptionally tender toward us. He lived for us alone. No mother’s heart could surpass his. Still with all that there was no weakness. All was just and well-regulated.”

With these preliminaries in mind, we will now turn to the masculine genius.

The Developing Genius

Conception through Childhood

Beginning *in utero*, testosterone triggers genes that will lead to a newborn boy’s behaviors. While newborn girls focus on faces and eye contact, boys are tuned in to movement.[1] Testosterone, vasopressin, and cortisol drive the urge towards aggression and competition. Regardless of cultural influence, boys will spend 65% of their free time in competitive activity while girls spend only 35% on the same. When given typically female toys like dolls, boys most likely turn them into weapons. They have been found to use domestic items as tools or weapons six times more than girls.[2] In the toddler male brain, the hypothalamus is forming to initiate competitive behavior and work towards victory. In this early play, bluffing, posturing, and fighting can be observed. Researchers have observed that by age two boys’ brains are better able to recognize social hierarchy and they are driven towards physical and social dominance.[3]

The male brain is more naturally suited to work with objects in the environment. By age five, the major cognitive difference between a boy’s brain and a girl’s brain is the ability to mentally rotate and manipulate objects.[4] The female brain can access these same circuits, but they have to be intentionally activated. These phenomena give boys a head start on learning how to manipulate their environments and ultimately best serve the external needs of a family.

Discovering the Female

Beginning around age nine, the most significant development in the male brain involves a twenty-fold increase of testosterone.[5] The male hypothalamus, where the neural circuits for sexual pursuit are located, grows twice as large as a female’s. Here develops the physiological correlate to the characteristic of the masculine genius to pursue and initiate.

The increase of testosterone, along with vasopressin and cortisol, also makes the male brain more sensitive to threats against status or territory. The male’s sympathetic nervous response (the “flight-or-fight” system) is fueled by this combination of hormones.[6] These changes give rise to behaviors typically observed in a teenage boy such as a greater need for privacy—personal domain to have control over—and conflict with authority. While discipline is necessary, looking through the lens of the masculine genius deepens our understanding of misunderstood behaviors.

Teenage boys also learn how to better anticipate threats in the environment posed by other people. Vasopressin works in the male brain to interpret aggression in others' faces. Even neutral faces will be interpreted more frequently as negative or aggressive when vasopressin is increased.[7] (Girls, by contrast, will interpret neutral faces as friendlier under the influence of increased vasopressin.) The amygdala and hypothalamus in the male brain are primed with greater sensitivity to hormonal increases, leading to aggressive alertness and activation of the sympathetic nervous system.[8]

Procreation

As testosterone increases, visual circuits relay information about a woman's fertility through unconsciously perceived traits. The hypothalamus takes over much of a man's behavior at this point, as everything in his brain is geared towards procreation. The drive towards fatherhood is imprinted in the man's brain. Olfactory receptors are tuned in to pheromones that communicate beneficial traits in a woman for sexual compatibility and the generation of children. Sensory neural circuits connect to the release of oxytocin and an increase of testosterone, further amplifying the drive towards bonding. [9] Due to his increased ability to take risks, lower fear of consequences, and greater drive towards finding a mate, a man is built to initiate sexual relationships.

Physiologically, the sexual encounter ends for a man at the point of ejaculation, while for the woman this moment is potentially the beginning of what will happen in her body. Whereas the man's brain is tuned into the fertility of a woman, his desire being amplified when his neural circuits detect her pheromones, the woman's brain is tuned into the personal character traits of a man, ones which give her a sense of whether or not he will remain committed to providing for and protecting the potential child born of an encounter. Though these character traits may become distorted in some way, they are typically strength, courage, leadership, loyalty, and respectability. These are the very same traits men are neurologically disposed to observe and attempt to emulate in their environment from boyhood.

Parenting

Throughout the process of gestation and birthing a child, the changes in a man's brain are not as obvious as they are in a woman's brain; but in some ways they are just as drastic. Fathers have emotional, physical, and hormonal changes that occur along with those in mothers. During the last stage of pregnancy, male testosterone levels decrease over 20% and prolactin levels increase 33%.[10] Researchers believe that pheromones released by the mother help to initiate these shifts in the father's brain. Prolactin helps fathers respond more sensitively to their newborn babies. Their hearing sensitivity increases as does their empathic response.[11] The ability to tend to the new baby does not come as quickly for the father as it does for the mother. Even though it is not immediately active, the father's brain is wired to experience the same attunement for the baby, even if it is not manifested in the same way. The more contact he has with the baby, however, the greater the effect of dopamine and oxytocin in increasing bonding and the ability to feel greater empathy for his new child.[12] His amygdala, anterior cingulate cortex, and insula will respond with greater sensitivity to the cries of a new baby as time goes on.

This is a fascinating neurological correlate to the observation made by JPII in *Mulieris Dignitatem*:

This unique contact with the new human being developing within the mother gives rise to an attitude towards human beings—not only towards her own child, but every human being—which profoundly marks the woman's personality. It is commonly thought that women are more capable than men of paying attention to another person, and that motherhood develops this predisposition even more. The man—even with all his sharing in parenthood—always remains “outside” the process of pregnancy and the baby's birth; *in many ways he has to learn his own “fatherhood” from the mother.*

(emphasis added)

A man who is already attuned to his wife will follow her lead in being attuned to the child, and as contact increases, so does his ability to develop his own empathy and tenderness. A man's brain changes, in some ways developing the characteristics women have at the outset, as his disposition towards his own child grows. He becomes a better father for it.

Fathers' sympathetic nervous systems are not activated to the same extent as mothers' when children are playing, and so they take risks with their children, entrusting them to masculine strength and confidence in ways that typically surprise new mothers. This type of play has been shown to form self-confidence in boys and girls as well as the ability to socially engage in healthier ways with peers.[13] Men's voices have also been shown to register differently for children, especially in areas of attention and obedience.

The Communicating Genius

Neural Connectivity

The feminine genius correlates with greater trans-hemispheric communication. Women are better able to connect feelings to words and use language to express interior experiences and memories.[14] This helps them communicate verbally with others, which builds relationships.

Greater connectivity also gives women a much deeper sense of intuition. Intuition is differentiated from rational analysis as a method of understanding. It allows women to communicate with a kind of *transrational* understanding of another person's needs or experience.[15] Here is another way that a woman's body is made to make persons inside of it. Through intuition, the female brain is able to understand the needs or experience of a baby, either pre-born in the womb or post-natal, before the child develops the use of rationally based language. My wife (without necessarily knowing how) will immediately know why our baby is crying, while I have to think through a checklist to figure out what the problem might be.

There is less connectivity between the right and left hemispheres in the male brain. This allows for greater *compartmentalization*. At the same time, there is actually more connection between the front and back of each hemisphere in the male brain. These two realities contribute to the masculine genius. Men are better at spatial organization and abstract thinking, both of which utilize intra-hemispheric communication. These qualities dispose a man to make decisions and solve problems that are related to the external environment. Intra-hemispheric frontal-lobe modulation is more natural for men, which makes it easier to detach from the emotional considerations of a situation.[16] These qualities generally predispose a man toward a greater use of unemotional, rational thinking. At times when a certain emotional distance is required to make decisions for the wellbeing of a family, a man's brain is particularly well suited.

It is important to note that the feminine complement to the masculine trait of rationality is not *irrationality*, but *transrationality*, as described above. Far from being a weakness, the fact that the female brain is less physiologically dependent on rationality than the male brain indicates that women are *not limited* by the need to communicate with structured and rational constructs. Women, indeed, could be said to be more sophisticated in the way they communicate. Unfortunately, our world has come to elevate the idea of rational above the idea of intuitive. Albert Einstein is quoted as saying, "the intuitive mind is a sacred gift and the rational mind is a faithful servant." [17] We have come to worship the servant and defile the sacred gift. Still, as we elevate the qualities of the feminine genius to their proper dignity, we must do the same for those qualities proper to the masculine genius.

Conclusion

These are the physiological realities of every healthy man and woman, whether or not a new person is actually conceived. As a woman is totally focused within on the new person developing in her body, knowing how to care for new life intuitively and transrationally, man is built to forge the way forward, providing for the needs of mother and child, and protecting against any outside threat to either. Together, man and woman form the unity that God intended for the sacred collaboration of creating new life. These observations identify only a few of the physiological realities that illuminate what it means to be male and female. It is a step towards a truly integrated model of the human person as male and female.

- [1] Wright, C. L., S. R. Burks, et al. (2008). "Identification of prostaglandin E2 receptors mediating perinatal masculinization of adult sex behavior and neuroanatomical correlates." *Dev Neurobiol* 68(12): 1406–19.
- [2] Lever, J. (1976). "Sex differences in the games children play." *Social Problems* 23: 478–87.
- [3] Archer, J. (2006). "Testosterone and human aggression: An evaluation of the challenge hypothesis." *Neurosci Biobehav Rev* 30(3): 319–45.
- [4] Keller, K., and V. Menon (2009). "Gender differences in the functional and structural neuroanatomy of mathematical cognition." *Neuroimage* 47(1): 342–52.
- [5] Larsen, P. R., ed, *Williams Textbook of Endocrinology*, 10th ed. (2003).
- [6] Archer, J. (2006). "Testosterone and human aggression: An evaluation of the challenge hypothesis." *Neurosci Biobehav Rev* 30(3): 319–45.
- [7] McClure, E. B., C. S. Monk, et al. (2004). "A developmental examination of gender differences in brain engagement during evaluation of threat." *Biol Psychiatry* 55(11): 1047–55.
- [8] Giedd, J. N., F. B. Lalonde, et al. (2009). "Anatomical brain magnetic resonance imaging of typically developing children and adolescents." *J Am Acad Child Adolesc Psychiatry* 48(5): 465–70.
- [9] Savic, I., H. Berglund, et al. (2001). "Smelling of odorous sex hormonelike compounds causes sex-differentiated hypothalamic activations in humans." *Neuron* 31(4): 661– 68.
- [10] Storey, A. E., C. J. Walsh, et al. (2000). "Hormonal correlates of paternal responsiveness in new and expectant fathers." *Evol Hum Behav* 21(2): 79-95.
- [11] Swain, J. E., J. P. Lorberbaum, et al. (2007). "Brain basis of early parent-infant interactions: Psychology, physiology, and in vivo functional neuroimaging studies." *J Child Psychol Psychiatry* 48(3–4): 262–87.
- [12] Leckman, J. F., R. Feldman, et al. (2004). "Primary parental preoccupation: Circuits, genes, and the crucial role of the environment." *J Neural Transm* 111(7): 753–71.
- [13] Grossmann, K., K. E. Grossmann, E. Fremmer-Bombik, H. Kindler, H. Scheuerer-Englisch, and P. Zimmermann (2002). "The uniqueness of the child-father attachment relationship: Fathers' sensitive and challenging play as a pivotal variable in a 16-year longitudinal study." *Social Development* 11(3): 307– 31.

[14] Gasbarri, A., B. Arnone, et al. (2006). “Sex-related lateralized effect of emotional content on declarative memory: An event related potential study.” *Behav Brain Res* 168(2): 177–84.

[15] Stern, K., *The Flight From Woman* (New York: Macmillan, 1965).

[16] Gasbarri, A., B. Arnone, et al. (2007). “Sex-related hemispheric lateralization of electrical potentials evoked by arousing negative stimuli.” *Brain Res* 1138C: 178– 86.

[17] Samples, Bob, *The Metaphoric Mind: A Celebration of Creative Consciousness* 26, (Reading, MA.: Addison-Wesley, 1976), 26.

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