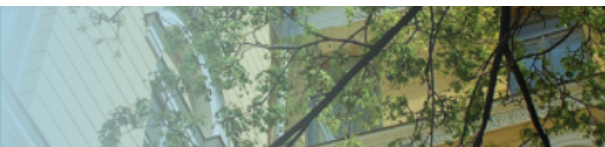


*Language and the Scientific Imagination*  
The 11<sup>th</sup> International Conference of ISSEI  
Language Centre, University of Helsinki (Finland)  
28 July – 2 August 2008



## **Hobbes (and Aristotle) on Science as the Basis of the Human Good**

### **Introduction**

Hobbes is famously critical of Aristotle's politics, claiming that it is grounded in philosophical, metaphysical and scientific error.<sup>1</sup> In particular, Hobbes challenges Aristotle's idea that the 'human good' is embedded in nature and that political association is natural to human beings.<sup>2</sup> On Hobbes' account, all human activity, including the construction of human goods can be explained best through his own 'corrected' mechanistic-materialist, individualistic 'science' of human behavior. Politics, Hobbes wants to demonstrate, is the result of artificial covenant rather than of the natural outgrowth of political community.

In this paper I propose that there are limitations to both the Aristotelian and Hobbesian model. Neither Hobbes nor Aristotle can explain adequately what one could consider a most basic and minimal human good – the perpetuation of the human species. Concomitantly, neither thinker can fully account for a most fundamental political imperative – the continuation of the political community.

The limitations of both Hobbes and Aristotle centre on their description of familial relations. Both use the claims of 'science' in the form of biological imperatives to depict relations between mothers, fathers and children. However, neither is successful in demonstrating how these relations lead to a politics where, in Hobbes case, artificial

covenants ensure biological and political perpetuation of the species, or where, in Aristotle's case, natural human bonds ensure that the good of the political community is furthered. Although I focus more on Hobbes than on Aristotle in this paper, I sketch out briefly the limitations in the Aristotelian account as well, to illustrate more clearly what is missing in each thinker. My aim is to suggest that each requires elements of the other to provide a more complete account of a politics that can supply the fundamental human good of political continuity.

### **Hobbes on Reason and Science**

Hobbes' depicts human reason as an activity that entails a *succession* of thoughts (mental discourse).<sup>3</sup> This activity can be relatively unguided, in which case it resembles dreaming. When it is guided by desires or appetites, however, it becomes more sequential. Both humans and animals engage in the kind of regulated train of thought that seeks to find the means to achieve a desired effect. But only human beings have the curiosity to seek to discover the causes and consequences of desired effects and to find diverse means to achieve desired ends.

Another distinctive human activity is Speech which consists of using agreed definitions, or names, to signify thing and connecting them in a causal sequence - "For REASON, in this sense, is nothing but *Reckoning* (that is, Adding and Subtracting) of the Consequences of generall names agreed upon, for the *marking* and *signifying* of our thoughts; I say *marking* them, when we reckon by ourselves; and *signifying*, when we demonstrate, or approve our reckoning to other men."<sup>4</sup> Those things that are capable of

being named are the only things that can be taken as the subject of reason. These include (1) what is deemed Matter or Body (2) names by which matter and body are distinguished from one another (3) things that bring into account properties of our own bodies, which are derived from what affects our five senses. (4) Names of the names themselves. <sup>5</sup>

Hobbes emphasizes that the operation of human reason is the same, whether the tools or objects of reckoning are numbers, words, or 'political entities' - which are themselves only representations of words – “When a man *Reasoneth*, he does nothing else but conceive a summe totall, from *Addition* of parcels; or conceive a Remainder, from *Subtraction* of one summe from another; which (if it be done by Words,) is conceiving of the consequence of the names of all the parts, to the name of the whole; or from the names of the whole and one part, to the name of the other part.” <sup>6</sup> Reasoning becomes calculation in Hobbes - “ in what matter soever there is place for *addition* and *subtraction*, there is also place for *Reason*; and where these have no place, there *Reason* has nothing at all to do. “<sup>7</sup>

Science is both the activity of reasoning and the end result of reasoning. Hobbes introduces it as a method that seeks the 'truth' by using agreed upon definitions of words, or speech, <sup>8</sup> and putting these definitions together in a causal order. It is a way of calculating the relationship among things with the aim of causing and predicting desired consequences. – “And whereas Sense and Memory are but knowledge of Fact, which is a thing past, and irrevocable; *Science* is the knowledge of Consequences, and dependence of one fact upon another.” <sup>9</sup> The 'truth' that can be acquired as the result of Science is not absolute but conditional in the sense that it rests on making the proper logical connections

among agreed upon definitions. Hobbes declares that “True and False are attributes of Speech, not of Things. And where Speech is not, there is neither Truth nor *Falsehood*.”<sup>10</sup> For Hobbes there is no outside reference point or Aristotelian ‘essence’ in Nature to which speech names refers. They are simply agreed upon definitions.

### **Hobbes on Biology, Philosophy and Politics**

What moves human beings to activate their reason, or to engage in any activity, are their appetites and aversions, grounded in the biological body? Both humans and animals, Hobbes maintains, are propelled by two sorts of motion (1) the *vital* or involuntary motions involved in bodily activity such as breathing and the (2) *voluntary motions* that propel towards something (appetites) or away from something (aversions).<sup>11</sup> What distinguishes humans from animals is the ability to name their appetites and aversions. Most important for Hobbes’ account of ‘politics’ is that individual human beings can and do name what they desire as ‘good’ and what they want to avoid as ‘evil’. In the absence of an agreed upon definition of names and words, it cannot be decided by reference to ‘Nature’ or a transcendental ‘essence’ what is ‘true’ and ‘false’, ‘good’ and ‘evil’. These require an Arbiter or Judge who determines among conflicting definitions what is to be considered ‘true’ and ‘good’ through establishing laws backed by punishment for breaches. According to Hobbes, only a Sovereign Will with absolute authority has the power to establish and compel obedience to such laws. Such a situation by Hobbes’ definition constitutes ‘civil society’.

Similarly, the enterprise of Philosophy requires a common Arbiter or Judge, a characteristic of civil society. Hobbes claims that from science comes wisdom and therefore philosophy – “By PHILOSOPHY, is understood the *Knowledge acquired by Reasoning, from the Manner off the Generation of any thing, to the Properties; or from the Properties, to some possible Way of Generation of the same; to the end to bee able to produce, as far as matter and humane force permit, such Effects, as humane life required.*

“<sup>12</sup> Hobbes’ own philosophy of politics, however, cannot provide a plausible or reasonable account of the generation of human beings.

Hobbes is consistent in applying his framework of what constitutes human reasoning and the activity of science to politics. All human behaviors and relations, whether, political familial, or social, according to Hobbes, can be defined as driven by similar biological grounded appetitive (and aversive) imperatives. He uses the device of the ‘state of nature’ to demonstrative how individual human beings, without a Sovereign Will who can establish and compel obedience to civil law, are necessarily driven by their appetites and aversions to a condition of war of all against all. This is a state where there is no industry or science. There can be no shared knowledge of ‘truth’ or ‘good’, since there is no common authority to determine what signifies an agreed upon definition of a thing. Indeed, if one works through Hobbes’ logic on the biology of reproduction, there is no guarantee that the human species can reproduce itself. It becomes a state where not only the life of the individual human being, but also the life of the human species is precarious.

## **The Hobbesian State of Nature**

According to Hobbes' own abstract definition of the state of nature as a hypothetical state that can occur at any time, it is a condition in which there is no common Sovereign authority to establish and compel obedience to civil law.<sup>13</sup> In this condition, sexual appetite may drive male and female to unite but it is unlikely that the male would remain with the female afterwards, or even acknowledge 'paternity' of common offspring. The conjugal relationship is a result not of 'nature' or 'biology', but of civil law, Hobbes proposes. Only in civil society, where a Sovereign Authority erects Marriage Laws, can one assume continuity in male- female associations.<sup>14</sup> In the state of nature, relations between male and female, and, more importantly, between adults and off-spring, are subject to similar imperatives as relations between strangers – competition, self-interest and a potential war of all against all. 'Generation' or biological ties do not seem to guarantee or engender any unique sort of bond. This emerges most clearly in Hobbes' presentation of the dynamic between a man and a woman and her off-spring.

In the 'state of nature', the consummation of male and female sexual desire may lead to pregnancy and birth. But, there is little justification, based on reason and science, for why the woman who gives birth would feed and care for the infant, thereby giving it life. Indeed, Hobbes asks whether she might not abandon it and leave it to another to find and nourish:

For in the condition of meer Nature, where there are no Matriomoniall lawes, it cannot be known who is the Father, unlesse it be declared by the Mother: and therefore the right of Dominion over the Child dependeth on her will, and is consequently hers. Again, seeing the Infant is first in the power of the Mother, so as she may either nourish, or expose it, if she nourish it, it oweth its life to the Mother; and is therefore obliged to obey her, rather than any other; and by consequence the Dominion over it is hers. But if she expose it, and another find, and nourish it, the Dominion is in him that nourish it. <sup>15</sup>

Using Hobbes' own reasoning, based on his depiction of human behavior in the state of nature, it is likely that the mother would abandon rather than nourish the infant. In the absence of an effective Law of Gratitude which compels individuals not to harm those who have conferred benefits on them, there is no guarantee that the child would not become the mother's enemy. There is even less incentive for a stranger to nourish a child in the absence of such a guarantee. Since human infants are born dependent requiring the care of another to live, and one cannot assume that care is forthcoming in the state of nature, even the propagation of the human species is precarious.

### **What's Missing in Hobbes**

Several elements are missing in Hobbes' biological scientific explanation for human behavior. (1) He briefly mentions a 'natural inclination 'of parents to their offspring. <sup>16</sup> However this seems to manifest itself in the desire to increase one's own honor and

power through one's kin<sup>17</sup> rather than a bond that ensures proper care for one's offspring. There is no comprehensive account of a maternal or paternal instinct or desire to have and care for children or a moral relationship between them that exists outside of contractual exchange, that is a reckoning based on voluntarily pursuing one's own interests or appetites. More serious than the lack of paternal instinct is the lack of a maternal bond that operates outside of contractual considerations.

(2) Hobbes makes few distinctions between male and female in their association with their offspring. Biological imperatives of conception, pregnancy and birth give the 'mother' knowledge that the infant is her 'own'. They also give her the first opportunity to have access to the new life – to exercise power that comes with the potential to nourish the infant, thus establishing dominion over it. However, absent in Hobbes' description of male and female biology or behavior is any notion of a 'natural' maternal instinct or love of one's own offspring. Instead, Hobbes presents women as having similar capacities for reasoning as men. Both sexes can calculate to kill another in the state of nature, if they so desire.<sup>18</sup> And, given the dynamics of the state of nature, it is likely that the woman's reckoning would lead her to abandon rather than nourish the infant. The distinction between abandonment and infanticide has little meaning in the state of nature. The biological fact that humans are born requiring nourishment from another to live means that the failure to provide such nourishment is akin to causing death. Furthermore, infanticide carries no moral condemnation in a state of nature, since what is 'good' and 'evil' are meaningless in the absence of agreed upon definitions.



(3) There is little concept of the uniqueness of biological ties or love of one's own. Instead, familial relations, including relations between parents and children, are assumed to be as artificial as political relationships. The parent-child relationship, as Hobbes depicts it, is based on an artificial covenant, similar to the political covenant that generates a Sovereign Will in civil society. A covenant requires that one party perform 'afterwards' their part of the contractual exchange of benefit. Yet covenants are only active where there is a Sovereign Will to ensure obedience, found only in civil society. Generational continuity remains a problem in civil society to the extent that the family – as 'private association' is left unregulated by the Sovereign Will. As such the relations between parents and children are left to the exigencies of the state of nature – a competitive potential war of all against all.

### **Aristotle on Biology and Generation**

Seemingly, Aristotle overcomes the limitations of the Hobbesian model in accounting for the perpetuation of the species and the continuity of the political community by fleshing out precisely what Hobbes attempted to delete. (1) Aristotle grounds political community on a notion of male and female coming together in a natural association that unites their differences and propagates both the species and the political community.<sup>19</sup> (2) He distinguishes between male and female as biological entities with distinctive relations to each other and to their offspring.<sup>20</sup> (3) He emphasizes the moral uniqueness of familial relations in the household. The natural affection between parents and children forms a bond that is even stronger in the mother than the father.<sup>21</sup> Knowledge of one's own and the biological connection between parents and offspring generates a moral relationship

that obliges parents to care for their children's well-being, thereby providing the foundation for political community and continuity.

### **Limitations in the Aristotelian Model**

However, there are limitations to the Aristotelian model, which cannot be explained fully by Aristotle's own account of biology and science. These limitations emerge most clearly when one considers his recommendations on infant abandonment. In Book II of *The Politics* Aristotle provides a well-known criticism of Plato's community of wives and children as laid out in Book V of *The Republic*.<sup>22</sup> Strikingly, Aristotle fails to take Plato to task for the proposal that infants who are 'deformed' may be exposed at birth.

Furthermore, Aristotle proposes that laws stipulating that 'deformed' infants be exposed are necessary for the well-being of the community.<sup>23</sup> As well, he recommends laws that support inducing 'miscarriage' in early pregnancy for the purpose of regulating population growth. However, these recommendations contradict and challenge his claims about parental affection, in particular maternal affection. If women are naturally inclined to love their offspring and care for them, more so than men, how does one explain how they would deliberately and willingly abandon their own offspring or induce abortion of their own potential offspring?

According to Aristotle's 'science' of nature, all things contain a potential end or 'essence' towards which they move. All substances, including human beings, are in a state of becoming – moving from their potential to their final end, which forms the natural completion of their being. 'Deformed' infants might presumably be considered to be

`against nature' or nature's mistakes if they are deemed incapable of fulfilling their `human' potential. Yet, this justification for infant exposure is incompatible with Aristotle's emphasis on the soul rather than the body as `true' indicator of one's nature.<sup>24</sup>

The human good for Aristotle can only be fully developed through the political community which is deemed to be the `natural end' of human relations. For Aristotle, human reason is deliberative – it aims at the good, including the good of the political community. One might justify the exposure of `deformed' individual infants on the grounds that it aims towards the greater end of the development of the political community, by generating a healthy citizenry. However, one must then deem `nature' to have given women the deliberative capacity to `rule' their instinct of maternal love for the good of the political community. Yet Aristotle is quite adamant that women's deliberative capacity is not fully developed.<sup>25</sup> The biological distinctions he makes between male and female present a portrait of women as being `incomplete' in this capacity.

In both Aristotle and Hobbes, the mother- child association is of greater import for generational continuity than the father- child one. Aristotle shows us what is missing in Hobbes – a notion of maternal love and care for one's own. Hobbes shows us what is missing in Aristotle – an acknowledgement of the deliberative or reasoning capacity of women.

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<sup>1</sup> Thomas Hobbes, *Leviathan, Middlesex*, England: Penguin, 1977), Ch. 46, Book IV.

<sup>2</sup> Ibid, Ch. 17, Part II.

<sup>3</sup> Ibid, Ch 3, Part I

<sup>4</sup> Ibid, Ch. 5, Part I, 111.

<sup>5</sup> Ibid, Ch. 4, Part 1, 107

<sup>6</sup> Ibid, Ch. 5, Part I, 110

<sup>7</sup> Ibid, Ch. 5, Part I, 111

<sup>8</sup> “ So that in the right Definition of Names, lyes the first use of Speech; which is the Acquisition of Science:”, Ibid, Ch. 4, Part I, 106.

<sup>9</sup> Ibid, Ch 5, Part I, 115

<sup>10</sup> Ibid, Ch. 4, Part I, 105.

<sup>11</sup> Ibid, Ch.6, Part I

<sup>12</sup> Ibid, Ch. 46, Part IV, 682.

<sup>13</sup> Ibid, Ch. 13, Part I.

<sup>14</sup> Ibid, Ch. 20, Part II.

<sup>15</sup> Ibid, Ch. 20, Part II, 254.

<sup>16</sup> Ibid, Ch.20, Part II, 253

<sup>17</sup> Ibid, Ch. 20, Part II

<sup>18</sup> Ibid, Ch. 20, Part II, 253.

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<sup>19</sup> Aristotle, *The Politics*, Translated Ernest Barker (London: Oxford University Press, 1981), Ch.2, Book I.

<sup>20</sup> Aristotle, *On the Generation of Animals*, Translated by Arthur Platt (eBooks@Adelaide, 2007), Book II.

<sup>21</sup> Aristotle, *The Nicomachean Ethics*, Translated by David Ross (Oxford: Oxford University Press, 1980), Ch. 7, 8, 12, Book VIII.

<sup>22</sup> Aristotle, *the Politics*, Ch. 3, Book II.

<sup>23</sup> Ibid, Ch.16, Book VII

<sup>24</sup> See Aristotle's discussion of the differences between 'natural' and 'conventional' slavery in *The Politics*, Ch.5, Book I

<sup>25</sup> Ibid, Ch.2, Book I