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Molecular metaphors taking on lives of their own: An investigation of metaphor in the conceptualisation of genetics and immunology

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MOLECULAR METAPHORS TAKING ON LIVES OF THEIR OWN: AN INVESTIGATION OF METAPHOR IN THE CONCEPTUALISATION OF GENETICS AND IMMUNOLOGY

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A research report submitted to the Faculty of Arts, University of the Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the degree of Master of Arts (by coursework and research report).

Johannesburg, 2004.

ABSTRACT

Genetics and immunology presently hold tremendous possibilities for changing the future through their biotechnological applications. To comprehend such complex subjects metaphor is generally employed. It is my contention that as these scientific concepts are repeatedly reinforced in both scientific and mass media representations, the metaphors suffuse our conceptual system to such an extent that they are no longer recognised as metaphors. Instead, they tend to be viewed as scientific 'fact'. I have termed such pervasive metaphors, '*concept metaphors*'. I argue that the predominant concept metaphors regarding genetics and immunology are '*information coding*' and '*militarization*', respectively. Through this research, the origins of these concept metaphors as well as the extent to which they influence our current perceptions of life and health, become startlingly patent. I conclude by demonstrating how the utilisation of novel metaphors can significantly alter our conceptualisations and consequently, perceptions of these areas of molecular biology.

DECLARATION

I declare that this research report is my own original work. It is submitted (in partial fulfilment of the requirements) for the degree of Master of Arts in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any other degree or examination in any other university.

_____

Lauren Sylvan Brom

_____day of_____2004.

DEDICATION

To my parents

who provided me with a nurturing environment and genes

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I would like to gratefully thank my supervisor Nicole Ridgway for her fascinating knowledge and insights into the nature of science, when I thought I knew the science of nature. You helped me to more fully appreciate metaphors and you inspired me to liberate my mind, although initially I was not even aware that it was closed (if you'll excuse the metaphor). Thank you for your perceptive, understanding and adept supervision as well as your kindness and empathy. I realise how lucky I have been to have you as my supervisor.

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