ABSTRACT. Cloned organisms can be genetically altered so that they do not exhibit higher brain functioning. This form of therapeutic cloning allows for genetically identical organs and tissues to be harvested from the clone for the use of the organism that is cloned. “Spare parts” cloning promises many opportunities for future medical advances. What is the ontological and ethical status of spare parts, headless clones? This paper attempts to answer this question from the perspective of Aristotle’s view of the soul. Aristotle’s metaphysics as applied to his view of biological essences generates an ethic that can contribute to moral reasoning regarding the use of headless spare parts clones. The task of this paper is to show the implications that Aristotle’s view of the soul, if it is true, would have on the ethics of headless, spare parts cloning.

KEY WORDS: Aristotle, cloning, metaphysics, soul, spare parts clones

INTRODUCTION

“So scientists create headless frog embryos in laboratory.” So read a brief Associated Press article on the back page of the local newspaper on Sunday, October 19, 1997. The article stated that British scientists have been able to manipulate the genetic structure of a developing frog embryo so as to prohibit the growth of the frog’s head. The article made guesses at how such a technique might be used to clone genetically identical headless humans for organ transplants. Such headless clones “without a brain or central nervous system…may not technically qualify as embryos.”1 If it is true that such headless clones would not be human embryos, experimentation on them, or harvesting organs from them, would not involve harming a human embryo. Even advocates of a strong view of personhood, could not complain that any human being at an embryonic stage would be harmed if its organs were harvested. The task of this paper is to show the implications that Aristotle’s view of the soul, if it is true, would have on the ethics of headless, spare parts cloning.

In this presentation, I will answer four questions: (1) Would Aristotle believe that clones have souls? (2) Would Aristotle believe
that headless human clones have souls? (3) Would Aristotle believe that headless spare-parts cloning is virtuous? (4) Is Aristotle’s metaphysics of soul and the ethics which follow from it plausible?

DO CLONES HAVE SOULS?

The first puzzle for an Aristotelian account of the metaphysics of headless clones is the ontological status of clones. A human being as a biological organism is a substance, a composite entity of matter and form or body and soul. The key element of this composite, for the purposes of this paper, is the soul. The soul makes the matter to which it is connected into a specific kind of matter. In the case here, the soul makes the human body to be a body of a particular kind of primate. In broad terms the soul, according to Aristotle is “a substance in the sense of the form of a natural body having life potentiality within it,” or put another way, soul is a “substance in the sense which corresponds to the account of a thing . . . it is what it is to be for a body of the character just assigned.” If this is what the soul is (this definition will be elaborated below), the question is how do human beings come to have souls? It seems to me that Aristotle believed that the soul branches off or is propagated by the organism’s parents. If this is correct, then clones (which are simply latter-day twins) would come to have their souls in the same way that identical twins have their souls. Through the totipotentiality of each cell, clones, like latter-day twins obtain their soul from the parents of the cloned organism.

In the Generation of Animals, Aristotle states, “As no part [of the body], if it participate not in soul, will be a part except homonymously (as the eye of a dead man is still called an eye), so no soul will exist in anything except that of which it is a soul; it is plain therefore that semen both has soul, and is soul, potentially.” This would relate to cloning by somatic cell nuclear transfer in the following way. The nucleus of the somatic cell, which is removed for implantation into the egg, ceases to be a nucleus of that cell (it is one only homonymously). It has soul or is soul, now only potentially. A new soul comes into being when the chemical-electrical reaction for stimulating the nucleus of the new cell is complete, and the new cell begins to follow the same gestational process as a normal embryo. The soul of the clone comes into being at the time of the “artificial conception” of the clone, just as the new soul of a regular embryo comes into being at