Animalism is the view that human persons are biological entities, i.e., organisms or animals, and that therefore their diachronic identity has to be understood in purely biological terms. Animalism is becoming increasingly popular among metaphysicians, about to supersede the hitherto predominant psychological stance on personal identity.

My paper will present a critical analysis of animalism which shows it to be a tenable position only under the condition that it undergoes a serious self-transformation. More specifically, I will defend three critical claims about animalism in its current form, namely 1), *the Harmless Claim*: animalism has not yet provided a sufficiently developed account of its key notion of biological identity, 2) *the Not-so-harmless Claim*: what animalists actually say about biological identity is to a great extent at odds with what biological science tells us, 3) *the Radical Claim*: animalism cannot provide a convincing account of biological identity which is in line with biological science, unless it radically changes its underlying metaphysical assumptions.

I shall start with a critical survey of existing animalist accounts of biological identity, confronting these with challenges from biology as reflected in the philosophy of biology. I will argue that animalism, in its current form, fails to meet those challenges insofar as it is committed to the view that an organism is some sort of big thing ('substance'), made from smaller things (ultimately 'atoms'). I shall demonstrate how this commitment leads animalism into the dilemma of either eliminating or mystifying biological identity, a dilemma which is equally faced by psychological accounts of personal identity, manifest in the antagonism between so-called 'complex' and 'simple' theories.

On the basis of this diagnosis, I shall finally argue for replacing the thing ontological with a process ontological framework according to which organisms are not things but processes. I shall show how the resulting position, processual animalism, is able to accommodate the biological facts about organisms as revealed by biological science in a way that overcomes the traditional dilemma.