

**TIME SCARCITY AND  
“THE PROBLEM OF SOCIAL  
REPLICANTS:”  
CLONES AND THE COASE  
THEOREM**

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With the 30<sup>th</sup> anniversary of the classic sci-fi/film-noir movie *Blade Runner* approaching, as well as the recent news that the filmmaker Ridley Scott may soon direct a sequel (or possibly, a prequel) to the original film, we thought it fitting as well as timely to revisit the remarkable “battle of the replicants” presented in the original version of the film, namely, the life-and-death struggle between Roy Batty, an advanced and self-aware “social replicant” or humanoid clone, and his human creator, Dr. Eldon Tyrell, the reclusive genius and mad-scientist who invented the advanced Nexus-6 replicants, programming them with a limited four-year lifespan.

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But first, however, we begin by explaining why the title of our paper refers to the title of a landmark paper in the history of economic thought, Ronald Coase's "The Problem of Social Costs." After all, what could clones and the eponymous "Coase theorem" possibly have in common? Although the film, and the dystopian science fiction novel on which the film is based, pose a wide variety of deep ethical, scientific, and philosophical questions, such as the legal and moral rights of human androids and the ethics of cloning, in this paper we will focus on the life-and-death struggle between Roy Batty and Dr. Tyrell, the central conflict presented in *Blade Runner*, using a "Coasian" lens. We shall also address the following subsidiary puzzles posed by the film and the novel: what is the optimal lifespan of a human clone, such as the fictional Nexus-6 replicants depicted in *Blade Runner*? In addition, who decides what the optimal lifespan of a clone is? These queries from the world of science fiction may appear to be fanciful or esoteric, but they shall help us see Coase's famous

theorem, and the problem of conflict generally, in a new light.

The remainder of this paper is organized as follows: following this brief introduction, in Part II we define the conflict between the rebel replicants and their reclusive creator in terms of “time-scarcity.” After discussing some preliminary matters in Part III regarding justice, behavior, and the problem of perspective, in Part IV we then apply the Coase theorem, including Professor Coase’s counter-intuitive idea of reciprocal harms, to the central conflict in *Blade Runner*. Lastly, we conclude by explaining why one of the sources of this life-and-death conflict is the lack of competitive markets in replicant technology.