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THE LIFETIME OF TECHNOLOGICAL CIVILIZATIONS

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The last, and least certain, term in the well-known Drake Equation is L , the lifetime of a technological civilization. Published estimates of L , based almost entirely on the human experience, range over at least seven orders of magnitude, a range far wider than for other terms. Many of these estimates have been pessimistic, based on the fact that the very technological sophistication that makes a society visible at great distance can (and presumably will) be used to extirpate that society. We offer a different view on this matter, noting how the possibility for self-destruction is only a short-lived bottleneck that many civilizations will pass through. On the other hand, the influence of species self-modification or information acquired by interstellar contact could both greatly alter the meaning and ultimate relevance of L .