1124-54-41 **David J Lutzer*** (lutzer@math.wm.edu), **Sheldon W. Davis** and **Harold R. Bennett**.
Images of the countable ordinals. Preliminary report.

In this paper, we study spaces that are continuous images of the usual space $[0, \omega_1)$ of countable ordinals. We begin by showing that if Y is such a space and is T_3 then Y has a monotonically normal compactification, is monotonically normal, locally compact, and scattered. Examples show that regularity is needed in these results. We investigate when a regular continuous image of the countable ordinals must be compact, paracompact, and metrizable. For example, we show that metrizability of such a Y is equivalent to each of the following: Y has a G_δ-diagonal, Y is perfect, Y has a point-countable base, Y has countable cellularity, Y has a small diagonal in the sense of Hušek, and Y has a σ-minimal base. We give an example of a non-metrizable compact monotonically normal space every subspace of which is a paracompact p-space. We also obtain an absolute version of the Juhasz-Szentmiklossy theorem for small spaces by proving that if Y is any compact Hausdorff space having $|Y| \leq \aleph_1$ and having a small diagonal, then Y is metrizable, and we deduce a recent result by Gruenhage on scattered compact spaces with small diagonals from work of Mrowka, Rajagopalan, and Soundararajan. (Received August 14, 2016)