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Cover RNA transcripts are ultimately cleaved into constituent nucleotides during degradation and recycling. In this issue, it is reported that RNA transcripts can also be cleaved in a regulated manner to generate smaller, stable RNAs that contribute to the diversity of the eukaryotic transcriptome. The disjunction illustrated on the cover represents the prevalent cleavage of RNA transcripts in geometrically abstract terms. (Cover illustration by Tim Mercer. [For details, see Mercer et al., pp. 1639–1650.]