This paper investigates tradeoffs between various basic complexity measures of propositional resolution proofs, viz., their *size*, *width* and *space* complexity. The width of a resolution proof is the maximal size of a clause in it, and its space is the minimum number of clauses that need to be kept in memory simultaneously to check the proof.

The first main result shows that width and space cannot be minimized simutaneously in tree-like resolution, by constructing a family T_n of Horn formulas such that:

- T_n has tree-like resolution proofs of linear size an constant space.
- T_n has resolution proofs of constant width.
- For every tree-like resolution proof of T_n, the product of its width and space is $\Omega(n/\log n)$.

The formulas T_n are the implication graph formulas for a family of graphs of size n having pebbling measure $\Omega(n/\log n)$, from which many example formulas in propositional proof complexity have been derived.

The second main result shows a tradeoff between size and space for dag-like resolution proofs, by the construction of another family of formulas T'_n such that:

- T'_n has resolution proofs of linear size an constant width.
- For every dag-like resolution proof of T'_n, the product of its space and the logarithm of its size is $\Omega(n/\log n)$.

It is obtained from T_n by *xorification*, i.e., by replacing every variable in T_n by the exclusive-or of two variables, a technique which has many fruitful applications in propositional proof complexity.