

Project Proposal

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Source Text: Judges 16:25-30

And when their hearts were merry, they said, “Call Samson, that he may entertain us.” So they called Samson out of the prison, and he entertained them. They made him stand between the pillars. And Samson said to the young man who held him by the hand, “Let me feel the pillars on which the house rests, that I may lean against them.” Now the house was full of men and women. All the lords of the Philistines were there, and on the roof there were about 3,000 men and women, who looked on while Samson entertained.

Then Samson called to the Lord and said, “O Lord God, please remember me and please strengthen me only this once, O God, that I may be avenged on the Philistines for my two eyes.” And Samson grasped the two middle pillars on which the house rested, and he leaned his weight against them, his right hand on the one and his left hand on the other. And Samson said, “Let me die with the Philistines.” Then he bowed with all his strength, and the house fell upon the lords and upon all the people who were in it. So the dead whom he killed at his death were more than those whom he had killed during his life.

Description of Motion

In this passage Samson moves two support pillars by pushing against them which causes the entire temple to collapse. This could mean several things, either that the pillars fall or collapse, causing the roof to collapse, or the movement of the pillars lifts and pushes the roof causing the entire roof to fall.

Proposed Model factors

I still have yet to find out if the pillars were one piece, or if they were in drums. I also do not know if the roof collapsed or was moved with the pillars. In either case though I would model the columns as a single cylinder, or stacks of smaller cylinders, and the roof as a rectangular plate. Samson pushing on the columns would be modeled as a force exerted on the cylinders below their center of mass.