Reigate Stone at the Tower of London

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Introduction
Reigate Stone was used extensively in South-East England between the 11th and 18th Centuries, contributing to a legacy of medieval heritage that ranges from parish churches to royal palaces. It is a ‘glauconitic malmstone’, a unique building stone to the British Isles. It was easy to carve decoratively, however also highly susceptible to degradation. By the 15th Century many buildings were already in an advanced stage of decay. Long Centuries, contributing to a legacy of medieval heritage that ranges from parish churches to royal palaces. It is a ‘glauconitic malmstone’, a unique building stone to the British Isles. It was easy to carve decoratively, however also highly susceptible to degradation. By the 15th Century many buildings were already in an advanced stage of decay. Long

Research Questions
1. How and why does the condition of Reigate Stone vary across different locations?
2. What deterioration patterns are evident? Can these be linked to local environment?
3. How successful have past treatments of Reigate Stone been?

Methodology
The MRes project will employ a field-based methodology; learning from the current condition of Reigate Stone in situ, informed by knowledge of both their history (previous treatments and environmental data) and their current local environment.

This will focus on the Tower of London, given its relatively large stock of Reigate and the long history of conservation efforts. Research will be supported by investigations at Hampton Court Palace, to assess the influence of local climate (e.g. pollution). A range of environmental monitoring and non-destructive testing methods will be employed. Following an initial stock take, a more detailed survey will be conducted on noticeable typologies. These should inform a database of situations and conditions.

Intended Outcomes
This stage of the project will cover the anamnesis and initial diagnosis of Reigate Stone decay, by providing a full condition survey of two key sites. This data will assist laboratory testing, to be conducted during the DPhil. The overall aim will be to develop a system dynamics approach, by linking degradation to measurable parameters.