

Evening Excursion to The Building Stones of Glasgow

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Leader: Dr Judith Lawson

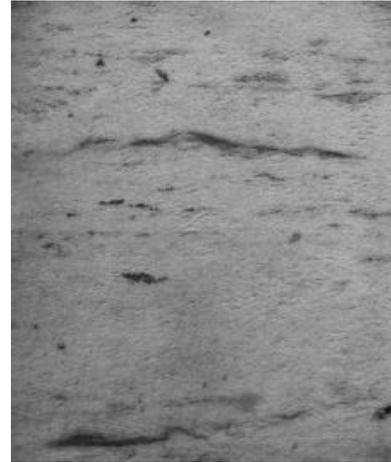
Participants: 30

Report by *Anne Gray*

We met at 6.30 pm at St George's Tron Church, at the corner of Buchanan Street and Nelson Mandela Place, from where Judith led us on a small circuit of the city centre. We studied 10 buildings and several statues, which varied considerably in style and in the history of their construction.

The Tron Church of St George is an elegant early 19th century building in cream sandstone. It was an appropriate starting point as it is one of the few extant buildings in the city that is constructed of the local sandstone. The whole area around Queen Street to the north east of the church, including the site of Queen Street station, was one large quarry at the beginning of the 19th century. Several quarries were opened to meet the demand for new buildings at a time when the city was rapidly expanding.

The local cream Carboniferous sandstone was worked out by the 1890s.



*Early building stone of Glasgow
fine laminated cream sandstone with ripple marks
and dark organic layers*

Judith pointed out that, unlike many towns in England which are dominated by brick buildings, Glasgow is overwhelmingly a city of stone buildings because of the lack of a local source of good brick clay.

Before the development of the canals and later the railways, local stone was much in demand, as transport costs were high. Later, large quarries were developed further out of the city, and the advent of the railway made possible the importation from Ayrshire of the red sandstone which characterises the city's buildings dating from the later part of the 19th century. The stone used in the Tron Church displays many narrow bedding planes which are interspersed with brown organic layers and contain traces of fossil ripple marks formed when water flowed over the bed of sand. These sandstones were from the Limestone Coal Group. In contrast, the white sandstone from which the former Stock Exchange, on the South-west side of Nelson Mandela Place, is built is a cream Carboniferous freestone with no clear bedding and can be cut in any direction. This is a very large imposing building, in ornate Venetian style, symbolising the traditional expertise of the Venetians in money matters. The stone was quarried at Overwood, near Stonehouse in the late 19th century.

On the north side of Nelson Mandela Place sits the former Royal Scottish Academy of Music and Drama, now a restaurant called Chaophraya. It is constructed from New Red Sandstone, of Permian age, quarried at Locharbriggs in Dumfriesshire, which is the only such quarry still in operation. This sandstone has well-rounded grains and exhibits large scale cross-bedding, with some good examples of truncated upper surfaces. The carved entrance way was constructed of large blocks that were halved to give symmetry on either side of the door. But several of these blocks were inverted! Judith explained that this New Red Sandstone, as well as being easily carved, was much more porous than the earlier sandstone, and this allowed for expansion and therefore made it more durable.

We then moved a little westwards, to the neo-classical building at 92-98 West George Street, formerly owned by the Royal Bank of Scotland and now occupied by Horton's restaurant, to examine a very

different building stone: Portland limestone. This is a dazzling fossiliferous, oolitic limestone of upper Jurassic age.



Opposite this, No 91, another former bank was designed in a very characteristic way for banks in Glasgow, with a base of pink Peterhead Granite and upper storeys of red sandstone. The granite contains pink feldspars, clear quartz and dark mica, and many small patches of black and white xenoliths.

A frequently seen combination of pink granite base and Permian red sandstone upper storeys in Glasgow banks.

We then went round the corner into Buchanan Street to look at a modern 1970s building, the Clydesdale Bank headquarters. This concrete framed structure is clad with slabs of granite from Argentina. Judith described how these granites were sent to Italy to be cut and were then transported to Aberdeen to be polished before reaching their final destination, involving an expense that reflected the wealth of the institution. It is a coarse-grained granite, composed of grey quartz, red feldspar, hornblende and biotite.

Opposite Queen Street Station, around the corner, stands a former Bank of England building. It had several features of note. It is mainly clad in cream-brown Carboniferous sandstone, but the ground floor levels are fronted with striking large panels of a polished brown and cream gneiss which is “on the way to becoming a granite”. It has long hydrothermal streaks and large cream feldspar crystals. This rock, called Juperano, is from Brazil. The entrance is clad in dark brown travertine from Siena, and has cream limestone floors. Judith commented that Rome is built of travertine, a Tertiary lake deposit.

Moving into George Square, we had a brief look at the bases of several statues, which are constructed mainly of Peterhead Granite, but the James Watt statue in the SW corner has a plinth fashioned from the less common grey Cornish granite, which has large white feldspar phenocrysts. We did not have time to study the famous buildings in the square, such as the City Chambers and the former Post Office, but Judith described how they were mainly built in the 19th century in cream sandstone from a number of quarries, including Dunmore, Giffnock and Hermand.

Our last leg of the circuit was St Vincent Place, Numbers 12 to 24. The entrance pillars to the first building are of a green serpentinite marble. Next to this is the former Citizen newspaper headquarters. Constructed from bright red Permian sandstone, it has lost much of its former glory and now looks quite derelict. The balustrade of the next building, the Clydesdale Bank, is of unpolished granite, which we wetted under Judith’s instruction, to reveal large pink feldspar phenocrysts in the pink and grey granite ground mass; this is the famous Shap granite.

In Glasgow, it was often used for kerbstones rather than buildings, and many of these can still be found lining the pavements today.

A granite kerbstone with feldspar phenocrysts in the city centre)



We finished our tour in the pillared entrance to the Gallery of Modern Art at around 8.30, as it started to rain and the light quality plummeted. We just had time to admire the Aberdeen granite plinth of the Wellington statue before Emily Unsworth formally thanked Judith, reflecting everyone's sentiment that it had been a most worthwhile tour, and that we would all now be looking at the buildings of Glasgow in a new light.

By the end of our tour, we were all aware of the march of time, not deep geological, but more recent time. The quarries that had dominated the city in the 19th century have vanished without trace, and many of the prestigious buildings have now fallen into decay. Banks and building societies, a college and a newspaper, and even the Stock Exchange have been converted to restaurants – if they are lucky. All are enveloped in the roar of modern traffic. However the spectacular stone which proclaimed their wealth remains.