Supplementary material 1: Class questionnaire conducted in January 2020 and January 2021 using two groups of knowledgeable graduate students from the Department of Geography and Environmental Studies at the University of Haifa, who are well versed in the study of natural hazards and historical earthquake damage. The students are referred to as "semiskilled".

What is the severity of the damage caused by the 1927 Jericho earthquake to the following structures?

(The survey is part of a scientific research conducted by Dr. Motti Zohar, Dr. Carmit Rappaport and Almog Arad from the University of Haifa & Dr. Amos Salamon from the Geological Survey of Israel)

Survey Question:

What is the severity degree that best describes the scope of damage caused by the 1927 Jericho earthquake?

Overview:

In this survey, you will be presented with historical texts and images that describe the damage caused to several structures by the 1927 Jericho earthquake. You will then be asked to review the text and images carefully and determine, for each case separately, what is the severity degree of the damage that best describes the given effects and damage. The severity degree of the damage should be defined on a scale between 1-12 degrees that is described below (see the table "**severity levels of damage"** below).

Steps:

- The following questionnaire contains reports of damage to several structures that were affected by the 1927 Jericho earthquake. Each of the given damage reports is illustrated by a text or an image.
- Please read and examine each report carefully and identify the described effect or damage

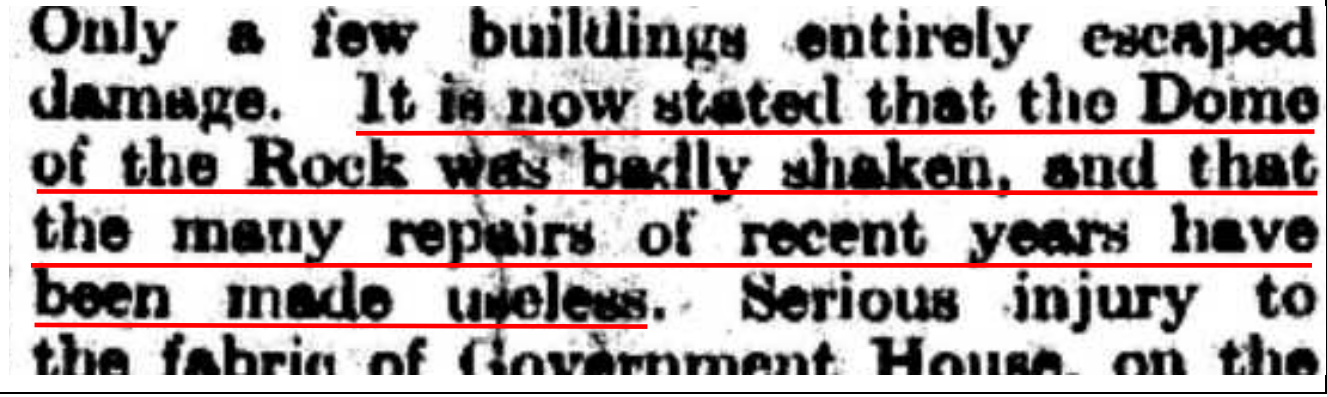
- Please note the structure name and where it is located
- Please note the reporting source and its date
- Review the 12 damage degrees in the enclosed table below (**severity levels of damage**) and determine the most appropriate degree that best fits the damage or effect.

Severity levels of damage:

Degree	Definition	Description
1	**Not felt**	The earthquake was not felt in the locality
2	**Scarcely felt**	Felt only by very few individual people at rest in houses
3	**Weak**	Felt indoors by a few people. People at rest feel a swaying or light trembling
4	**Largely observed**	Felt indoors by many people, outdoors by very few. A few people are awakened. Windows, doors and dishes rattle
5	**Strong**	Felt indoors by most, outdoors by few. Many sleeping people awake. A few are frightened. Buildings tremble throughout. Hanging objects swing considerably. Small objects are shifted. Doors and windows swing open or shut
6	**Slightly damaging**	Many people are frightened and run outdoors. Some objects fall. Many houses suffer slight non-structural damage like hair-line cracks and fall of small pieces of plaster
7	**Damaging**	Most people are frightened and run outdoors. Furniture is shifted and objects fall from shelves in large numbers. Many well built ordinary buildings suffer moderate damage: small cracks in walls, fall of plaster, parts of chimneys fall down; older buildings may show large cracks in walls and failure of fill-in walls
8	**Heavily damaging**	Many people find it difficult to stand. Many houses have large cracks in walls. A few well built ordinary buildings show serious failure of walls, while weak older structures may collapse
9	**Destructive**	General panic. Many weak constructions collapse. Even well built ordinary buildings show very heavy damage: serious failure of walls and partial structural failure
10	**Very destructive**	Many ordinary well built buildings collapse
11	**Devastating**	Most ordinary well built buildings collapse, even some with good earthquake resistant design are destroyed
12	**Completely devastating**	Almost all buildings are destroyed

Examples

Bellow you will find examples of affected and damaged structures as described in historical reports and photographs. Please note the location and source of the report, then carefully read the description, and finally **pay attention to the severity level as assigned by an expert (in red)**.

Damaged locality & reporting source	Description given by the historical report	severity assigned by an expert
Alexandria, Egypt (Egyptian Gazette, 12.07.1927)	A slight earthquake shock was felt at about 3.5 p.m. yesterday in Alexandria also, lasting for about one minuet.. (Egyptian Gazette, 12 July 1927).	**3-4**
The Dome of the Rock, Jerusalem (London TIMES 14.11.1927)	 Only a few buildings entirely escaped damage. It is now stated that the Dome of the Rock was badly shaken, and that the many repairs of recent years have been made useless. Serious injury to the fabric of Government House, on the	**6**

The Hebrew University, Jerusalem (Report of the engineer Michaeli in 1928)	length of the central wall. A typical example of such tension is the damaged walls in the new section of the Hebrew University building on Mt. Scopus (Fig. 4). The longitudinal walls of the building had split in all parts between the windows, doors and in the corners; the cracks traversed the joints (the weakest spots), and in some cases some stones were also smashed. Another	**7**
The minaret of the New Mosque, Amman (New York Times 13.11.1927)	**At Amman, he says, great damage was done. He saw the upper half of the minaret of the new mosque there crash down to the ground as if cut with a penknife. The new Royal Air**	**8**

Winter palace, Jericho (American colony photographers, 1927)		**9**

Survey Questionnaire

Age:
Gender:
Did you experience an earthquake before and when? Y / N

Following the instructions and examples above, please fill in the damage degree of each of the cases bellow. You will have to write a number (between 1-12) in the 'damage degree' column that reflects the severity of the damage in your opinion:

Question	Details of the report	Historical report	Your severity level	What is YOUR explanation for the estimated severity level?
1	**Mosque and minaret on Olivet, Jerusalem** American colony photographers, 1927			

2	**Mosque of Omar, Jerusalem** (The engineer Michaeli, 1928)	some cases some stones were also smashed. Another typical crack is the one traversing the height of two stories of a building situated near the „Hamâm" (public baths) close to the courtyard of the Mosque of Omar (Fig 5). Here too the crack had traversed the least resisting spot—the joints—and near the hole A in the lower part of the building. Another phase of the influence of the force		
3	**No details**	**The building has suffered very heavy structural damage and near-total collapse**		
4	**The government House, Jerusalem** (New York Times, 13.11.1927)	**rendered useless. Serious injury to the Government house on the Mount of Olives rendered it unfit for habitation, and the tower is in danger of collapse. A Russian maid servant was killed in the building by falling stones.**		

5	**A building at the Quarter of Deir-Abu-Tor, Jerusalem** (The engineer Michaeli, 1928)	I have also seen such a crack in a two-storeyed building in the Quarter of Deir-Abu-Tor where an arab mason had pulled down the entire damaged section of the construction which was built of large stones and began to rebuild it without taking into consideration that there was no strong connection between it and the „debesh" section which had not been affected at all in the entire height of the wall. To this form of damage can also be attributed		
6	**The Baghdadese Synagogue, Jerusalem** (Times, 14.11.1927)	**precariously supported by the four remaining columns. In the Bet Israel quarter the Baghdadese Synagogue collapsed. The Winter Palace Hotel in**		

7	**St. John's Convent at the Jordan,** (American colony photographers, 1927)			
8	**The Russian Church, Jerusalem** (The engineer Michaeli, 1928)	to such buildings is quite small. A fine example for this is the building of the Russian Church ("Moskobieh"), which was erected a little more than 45 years ago. Despite of the fact that the earthquake had very much affected this building, one cannot yet find any cracks in the walls of this beautiful construction, which is built of well-dressed stones and a good joining.		

9	**The Allenby Bridge** (New York Times, 13.11.1927)	**The Allenby Bridge was damaged at both ends. The Greek Catholic Church of the Holy Sepulchre has been declared unsafe because of the cracks in the walls. The roof of the**		
10	**A building at the Jewish Quarter, Jerusalem** (The engineer Michaeli, (1928)	In order to estimate the importance of anchors which are being used to a great extent in houses cracked by the earthquake, I shall mention here one case I had observed in a building in the Jewish Quarter of the Old City. Although there had already existed anchors in the building beforehand which stretched its walls to the height of the ceiling between the two storeys; the building had been greatly affected by the tremor; it had cracked and the storeys of the outer wall around the S-formed iron anchors (of iron pipe) had split. These		
11	**Grey Hill House, Hebrew University, Jerusalem** (Magness to Chaikin &	On pages 2 & 3 para 5 of your report you observe that the top storey of Grey Hill House, in which the Chemical & Microbiological Institute is situated, is to be dismantled & its floor is to be converted into a roof for the ground storey. From this observation & the reasons supporting it I infer that you do not consider it safe to build the ~~floor~~ again upon the old walls of Grey Hill House. But I am not sure that my interpretation is right, for in the following paragraph the cost of rebuilding the top storey is said to be £ 4000.-		

	Kornberg 17.11.1927)			
12	**No details**			
13	**The Armenian Church, Jerusalem** (Times, 14.11.1927)	the Armenian convent. The Armenian Church of St. James in Jerusalem is apparently unhurt, but most arches are cracked in the monastery. The top		

14	**The Basilica of Bethlehem** (New York times 14.11.1927)	In the Basilica in Bethlehem there is a crack opposite the Armenian Door and many in the walls of the Armenian Convent. The Armenian		
15	**The Baghdadese Synagogue, Jerusalem** (Times, 14.11.1927)	**In the Bet Israel quarter the Baghdadese Synagogue collapsed**		
16	**The minaret of David Tower, Jerusalem** (New York times 14.11.1927)	The top of the minaret at David's Tower was broken off and some stones were displaced in the other tower.		

17	**The Russian compound, Jerusalem** (New York times 14.11.1927)	At the Russian compound the shock was so severe that three of the columns supporting the cupola of the Russian church fell, leaving the cupola precariously supported by the four remaining columns. In the		
18	**Dwelling house on Olive Mountain** (American colony photographers, 1927)