

Mapping Destructions in the Southern Levant during the Transitional Bronze-Iron Ages

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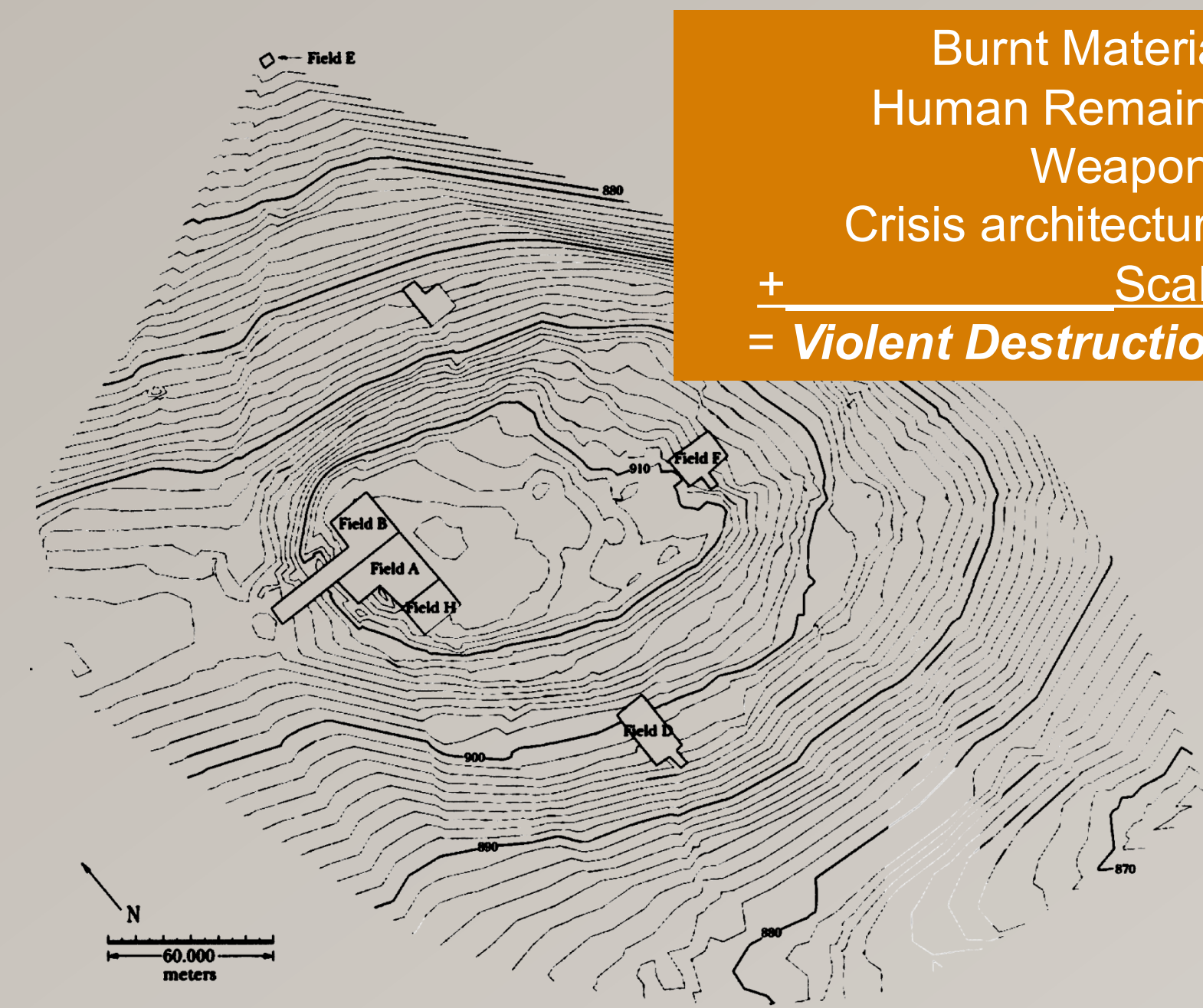
The Transitional Bronze – Iron Age

The Transitional Bronze-Iron Age (TBI, c. 1200 BCE-1000 BCE) is a period of major sociocultural, economic, and political change in the southern Levant. For many decades, this period was associated with violent destructions of long-lived settlements. These destructions were seen as *the* indicator of change in the TBI.

What is Destruction?

Destruction: total termination. It is often diagnosed through a ‘layer’ of materials which can range from ash deposits in a small area of the site to visibly destroyed buildings across the entire settlement. Such layers can accrue for many reasons, including accidental fires, natural disasters, and human-caused violence. Is it always prudent to equate destruction to violence?

Case Study: Tel ‘Umeiri



Tel ‘Umeiri Plan, *Madaba Plains Project*. 1997.

Food for Thought: TBI ‘Destructions by the Numbers

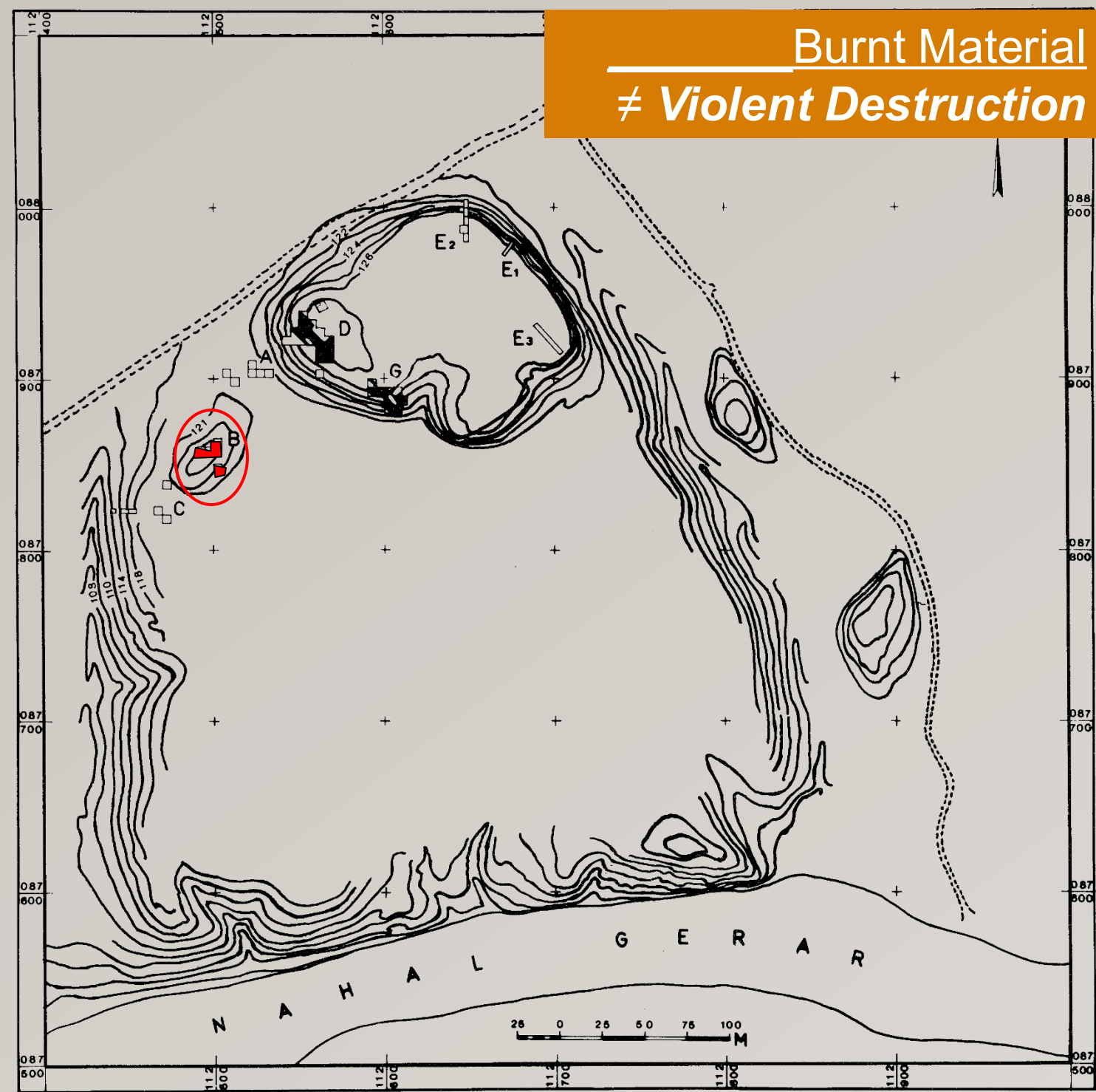
| Name | Site Size (approx.) | TBI Destruction Stratum | Total Excavated Area (approx.) | ‘Destruction’ Exposure Relative to Site |
|------------------|---------------------|-------------------------|--------------------------------|---|
| Tel Haror | 14 ha | 125 sq m | 0.16 ha | .085% |
| Tel Qassis | 4.3 ha | 25 sq m | 0.07 ha | 0.058% |
| Tel es-Sai'diyeh | 7.5 ha | 120 sq m | 0.47 ha | 1.42% |
| Tel Nami | 1.5 ha | 25 sq m | 0.13 ha | 0.17% |
| Tel Hefer | 4 ha | 412sq m | 0.09 ha | 1.03% |
| Megiddo | 6 ha | 2,218sq m | 2.7 ha | 3.7% |
| Lachish | 7.5 ha | 800sq m | 0.77 ha | 1.07% |

Visualizing Destruction by Violence: A Burden of Proof



Without a convincing amount of evidence, a destruction is more likely to have been caused by accident, natural disaster, abandonment, and so on.

Case Study: Tel Haror



Site Plan of Tel Haror showing area of presumed TBI destruction. BGU Excavations, 1993.



QuickBird Satellite Imagery of Tel Haror, 2020

Methodology

48 sites were selected for consideration based on whether they had been previously affiliated in legacy data with a possible violent destruction during, or just before or after the TBI. The cumulative data related to destruction at each site was weighed against whether it represented at least three or more indicators of violence. If data was unable to show conclusively that violence occurred, it is presumed it never did.

'Destructions' on a Sliding Scale

| Name | Presumed Destruction (BCE) | Likelihood of Violent Destruction | Cause | Location |
|-------------------------|----------------------------|-----------------------------------|-------|----------------------|
| Tel Michal | 1325–1275 | No evidence | N/A | 32.160321, 34.797529 |
| Tel el-Hesi | 1300 | No evidence | N/A | 31.547729, 34.730305 |
| Khirbet Rabud | 1300–1200 | No evidence | N/A | 31.431298, 35.018624 |
| Tel Abu al-Kharaz | 1300–1201 | No evidence | N/A | 32.399203, 35.594765 |
| Amman Airport Structure | 1275–1225 | No evidence | N/A | 31.7225, 35.993333 |
| Shiqmona | 1225–1175 | No evidence | N/A | 32.825213, 34.955549 |
| Tel Abu Hawam | 1225–1201 | No evidence | N/A | 32.800833, 35.019167 |
| Tel es-Safi | 1225–1201 | No evidence | N/A | 31.701538, 34.848254 |
| Tel Mevorakh | 1225–1101 | No evidence | N/A | 32.533416, 34.927344 |
| Tel Batash | 1200–1175 | No evidence | N/A | 31.784559, 34.910844 |
| Akko | 1200 | No evidence | N/A | 32.921111, 35.088333 |
| Tel Gerisa | 1200 | No evidence | N/A | 32.091647, 34.808219 |
| Ashdod | 1190–1101 | No evidence | N/A | 31.753611, 34.661667 |
| Tel Gemme | 950 | No evidence | N/A | 31.386976, 34.445595 |

| | | | | |
|--------------|-----------|----------|---------|----------------------|
| Tel Dor | 1300–1201 | Unlikely | Unknown | 33.048455, 35.102467 |
| Tel Zoror | 1225–1175 | Unlikely | Unknown | 32.428401, 34.971268 |
| Tel Azekah | 1225–1101 | Unlikely | Unknown | 31.699332, 34.935965 |
| Beth-Shemesh | 1200 | Unlikely | Unknown | 31.749983, 34.974871 |

| | | | | |
|----------------------|-----------|---------|---------|----------------------|
| Akhziv | 1300–1201 | Unclear | Unknown | 33.048455, 35.102467 |
| Tel Nami | 1225–1175 | Unclear | Unknown | 32.660278, 34.925278 |
| Afula | 1150–1050 | Unclear | Unknown | 32.611785, 35.289575 |
| Umm el-Dananir | 1300–1201 | Unclear | Unknown | 32.085833, 35.816667 |
| Tel Azekah | 1225–1201 | Unclear | Unknown | 31.699332, 34.935965 |
| Tel Miqne/Ekron | 1225–1201 | Unclear | Unknown | 31.778688, 34.849992 |
| Tel Haror | 1225–1201 | Unclear | Unknown | 31.381784, 34.607110 |
| Tel Bet Mirsim | 1235 | Unclear | Unknown | 31.455775, 34.909846 |
| Megiddo | 1150–1130 | Unclear | Unknown | 32.585278, 35.184444 |
| Tel el-Farah (south) | 1250–1201 | Unclear | Unknown | 31.282373, 34.482727 |
| Bet El | 1300–1200 | Unclear | Unknown | 31.928333, 35.238333 |
| Tel el-Fukhar | 1200 | Unclear | Unknown | 32.750531, 35.764048 |
| Tel Hefer | 1225–1201 | Unclear | Unknown | 32.372331, 34.908185 |
| Tel Yin'am | 1275–1225 | Unclear | Unknown | 32.713278, 35.512279 |
| Tel es-Saidiye | 1175–1125 | Unclear | Unknown | 32.267462, 35.576855 |
| Tel es-Sera' | 1175–1125 | Unclear | Unknown | 31.390624, 34.680529 |
| Tel 'Eton | 1200–1160 | Unclear | Unknown | 31.489870, 34.928332 |
| Tel Irbid | 1300–1201 | Unclear | Unknown | 32.558792, 35.847698 |
| Tel Keisan | 1225–1201 | Unclear | Unknown | 32.873105, 35.151011 |
| Yokneam | 1225–1201 | Unclear | Unknown | 32.640955, 35.112195 |
| Tel Qassis | 1300–1201 | Unclear | Unknown | 32.685303, 35.109251 |

| | | | | |
|-----------------|-----------|----------|--------------------|----------------------|
| Gezer | 1250–1201 | Unlikely | Unclear/Natural | 31.859712, 34.920077 |
| Tel Mor | 1225–1201 | Unlikely | Unclear/Earthquake | 31.822971, 34.656415 |
| Tel Beit She'an | 1175–1125 | Unlikely | Unclear/Earthquake | 32.504538, 35.502992 |
| Tel Der 'Alla | 1180–1150 | Unlikely | Earthquake | 32.188889, 35.603056 |

| | | | | |
|--------------|-----------|------|----------|----------------------|
| Tel Hazor | 1225–1175 | High | Violence | 33.017118, 35.568566 |
| Tel el-Umeri | 1225–1150 | High | Violence | 31.868611, 35.888056 |
| Aphek | 1230–1150 | High | Violence | 32.846072, 35.119969 |
| Jaffa | 1125 | High | Violence | 32.053739, 34.752801 |

Event (Horizon) Visibility in the Southern Levant: 1300-950 BCE

Analysis of destructions as a discreet field is understudied. These maps illustrate this by comparing the published evidence for presumed violent ‘destruction’ episodes between c. 1300 – 950 BCE to the likely causality of the possible destructions.

The upper map shows selected sites which have at some point been assumed to have been destroyed by violence within the published literature.

The lower shows the likelihood of violent destruction for each site based on the presence of evidence for violence

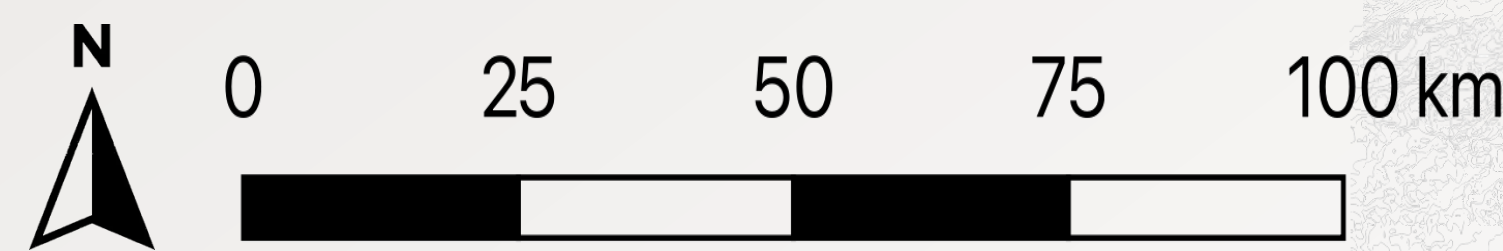
- No evidence of destruction
- Inconclusive (unlikely)
- Nonviolent destruction
- Destruction by violence

Conclusions

Destruction events require discreet assessment and typologizing, using a holistic consideration for any type of data that might be useful for understanding what caused such a catastrophic event.

Exposure of TBI levels at a given location are often only a small fraction of the entire site. To determine whether TBI remains are a representative sample, there is a high burden of proof for the kinds of data found within. Without multiple types of destruction evidence, these exposures are often not enough to act as proof of violence.

Out of 48, only 4 sites show clear evidence of violence. It is likely that the TBI was a peaceful transition, and “far less violent and filled with less destruction than is typically assumed.”¹



Destruction Causality

1.) J. Milek, 2017. *Sea Peoples, Philistines, and the Destruction of Cities: A Critical Examination of Destruction Layers 'Caused' by the 'Sea Peoples'*. Pp 134.