"The conceptual vehicle by means of which historians construct or analyze the contingency and temporal fatefulness of social life is the event. Historians see the flow of social life as being punctuated by significant happenings, by complexes of social action that somehow change the course of history."

-- William Sewell (2005:8)

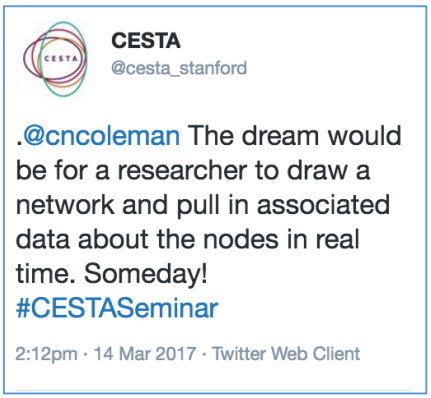
"From this (eventive) point of view, a picture of history as a network of lifelines of persistent items meeting in events in space/time emerges. This abstraction turns out to be extraordinary powerful… a surprising wealth of inferences arise…"

-- Martin Doerr (CIDOC-CRM co-creator) and Dolores Irizzo (2008)

Events and Pelagios

The **Linked Pasts** and **Time** Working Groups of Pelagios Commons are soliciting feedback from all Commons members, and others with an interest, on the topic of events and event modeling. Given that events are a central and powerful organizing structure for historical information, they could potentially join place as an essential "glue" for linking pasts. Geographer Doreen Massey has described place as "the meeting up of histories," (2005:4) a poetic view that might be readily explored computationally by modeling events.

The vision expressed in this recent Tweet from CESTA corresponds to the charters of Pelagios Commons as a whole and the Linked Pasts WG specifically, expressing a shared desire/need/requirement for linking digital nodes corresponding to several kinds of things to each other—places, people, artifacts, events—in an ultimately very large distributed graph of historical data. Certainly event representation is in the domain of the Time WG as well.



The Peripleo application in active development by the Pelagios team allows its users to navigate such an emerging graph and discover archaeological finds associated with places. The linked data that Peripleo accesses will grow to the extent individual research projects publish their data about other kinds of artifacts, people, and events that reference places found in Pelagios-linked gazetteers.

Events could have two roles in such a system: as an interconnection modeling pattern used to represent people, artifacts, etc., and as historical "items" themselves, to be discovered when querying a place. So the issues we put before the Commons are divided roughly along those lines:

- Is there interest in establishing an event model "standard" or best practice pattern? If so, what entities and relations are essential, or "core?" Or, are event models as particular to projects as gazetteer models seem to be?
- In the latter case, is the current Pelagios interconnection format for places a suitable paradigm, and what would one for events (and other "items") look like?

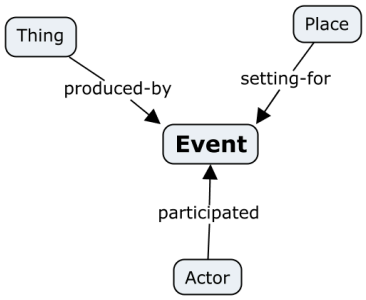


Figure 1 - Event centrality

Without getting too deeply into the weeds in this post (that will happen soon enough!), we put forward for discussion a 2009 article by Ryan Shaw, Raphaël Troncy, and Lynda Hardman, "LODE: Linking Open Descriptions of Events." It offers a concise survey and analysis of several event models, including CIDOC-CRM, and presents the LODE ontology as a candidate for historical linked data applications.

The LODE model (Fig. 2) is attractive in its simplicity, but does omit a few elements some might consider as core requirements. Its creators argue that, "a core event model should include only those relations about which a stable consensus has been reached, leaving more interpretive relations to … higher-level, application-specific models." The interpretive relations intentionally omitted in LODE include those for roles played by event participants, and those concerning event identity, including attribution for event descriptions when considered as authored "linguistic phenomena."

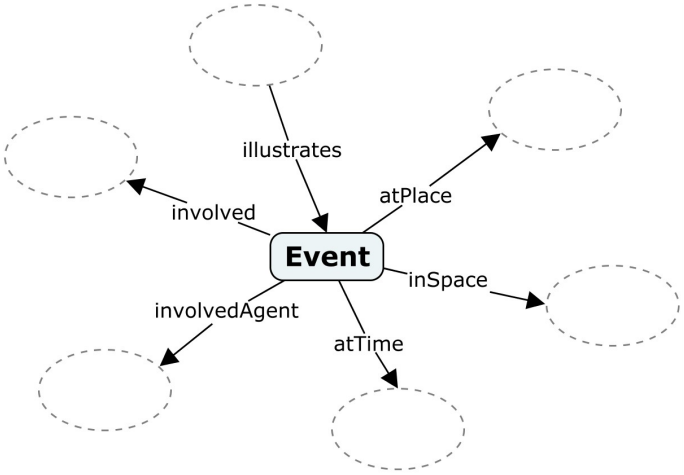


Figure 2 - Schematic view of LODE model (entity classes other than Event are unspecified)

We are very interested to get our colleagues' views on these issues. Does LODE seem like a useful starting point for a standard data format? Do some of the interpretive relations referenced belong in a core? Ideally, a workshop would bring together those with interest to discuss events in detail and produce a recommendation guiding future system development. Absent funds and time to

arrange such a meeting, we can begin discussion in the Linked Pasts forum on Pelagios Commons.

The links below include the referenced article, documentation of the LODE ontology, and some additional material about events and event models for historical research, which by sheer coincidence (!) includes the 2010 dissertations of both Ryan Shaw and Karl Grossner. Let us know what else belongs on this list.

Shaw, R., Troncy, R., & Hardman, L. (2009, December). Lode: Linking open descriptions of events**.** In *Asian Semantic Web Conference* (pp. 153-167). Springer Berlin Heidelberg.

LODE: An ontology for Linking Open Descriptions of Events (documentation)

Zotero Group Library for “Modeling historical events”

Doerr, M. & Iorizzo, D. (2008). The dream of a global knowledge network—A new approach. *ACM Journal on Computing and Cultural Heritage* 1(1): 5.1-5.23.

Grossner, K. (2010). *Representing historical knowledge in geographic information systems*. Ph.D. dissertation, University of California, Santa Barbara.

Hyvonen, E. Cultural Heritage Linked Data on the Semantic Web: Three Case Studies Using the Sampo
Modelhttp://seco.cs.aalto.fi/publications/submitted/hyvonen-vitoria-2017.pdf

Massey, D. (2005). *For space*. London: Sage

Shaw, R. B. (2010). *Events and periods as concepts for organizing historical knowledge* (Doctoral dissertation, University of California, Berkeley).

Sewell, W. H. (2005). *Logics of history*. Chicago: University of Chicago Press.