
NCeSS Digital Records Research Node

The Digital Replay System (DRS)

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DReSS Research Node

- New Forms of Digital Record for e-Social Science
 - Part of the ESRC's exploration of e-Science coordinated by the National Centre for e-Social Science
 - DReSS is a 3 year research collaboration between social scientists and computer scientists
 - It explores the development of new forms of 'digital record' supporting social science research in the digital age
 - It focuses on the development of new tools, applications and services through co-design
 - Aims to support both established and novel practices of data collection, collation, and analysis in 3 distinct Driver Projects:
 - Ethnographic analysis of ubiquitous computing technologies
 - Linguistic analysis of multi-modal features of natural language use
 - Psychological analysis of teaching and learning in e-Learning environments
 - Combines research practice in each of these domains to develop tools of more general utility

Core Themes

- Generality predicated on the investigation of 3 core themes:
 - **Record**, which focuses on the development of new technologies to record events that take place in the real world and in digital environments as well; specifically location-based technologies such as GPS and system-based recordings of human interaction.
 - **Replay**, which focuses on marrying diverse data sources together - e.g., location and system-based recordings with audio and video recordings - and replaying them simultaneously to support in depth analysis.
 - **Representation and re-representation**, which focuses on the move from the raw data collected and combined as part of the recording and replay process to the production of different and variously structured datasets to support different kinds of social science analysis.

Exploring Core Themes: 3 Driver Projects

- Generalities emerging from exploration of core themes:
 - Assembling qualitative records (ethnography)
 - Tools for parsing system-based recordings
 - Tools for combining system recordings and external resources
 - Structuring assembled records (linguistics)
 - Developing coding mechanisms that integrate and structure the heterogeneous content of digital records
 - Coupling qualitative and quantitative records (psychology)
 - Generating quantitative representations from coded data
 - Supporting transitions in coded data to generate new representations
 - Inputs and outputs
 - ‘Plugging in’ to other research tools: e.g., Transana, Replayer, SPSS
 - Reuse
 - Data gathered and analyses generated can be reused by other researchers
 - Ethics of reuse (mechanisms for managing access to data, etc. - the gatekeeper model)