

Feedback processes in modelling: when media transformation becomes a dialogue

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Abstract

As pointed out in Ciula et.al. (2023), modelling can fruitfully be analysed as a process of media transformation. Standards for modelling and information integration are key to the modelling of future computer systems. Thus, the model-for (Mahr 2009) process of creating a computer system based on a model expressed in a standardised language is a media transformation where the model is the source and the computer system is the target.

Such standards are developed based on aggregated experience among many practitioners and through meticulous processes of analysis, abstraction, and formalization. UML is a set of standardised visual languages for the modelling of computer systems developed by the Object Management Group, and CIDOC-CRM is an ontology for cultural heritage documentation and information integration. An example of how both standards are used in modelling processes is when the planned structure and processes of a new museum collection management system is based on ontological principles found in CIDOC-CRM and expressed in UML.

As both standards are meta-models based on experience and pre-existing systems and formalisations, their creation is also based on a modelling process. In this paper, examples will be given of cases where new systems are modelled and implemented based on standards while lessons learned from the process directly influences new versions of the standards. This will be used as a basis for discussing questions of feedback in media transformation processes, in which media transformations shows a dialogical nature, and comparing it to other cases where such dialogism can be claimed for media transformations.

References

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Keywords

Modelling, system development, media transformation, dialogism, standards

Bio

Øyvind Eide is a professor in Digital Humanities at the University of Cologne. He holds a PhD in Digital Humanities from King's College London (2013). He was the chair of The European Association for Digital Humanities (EADH) from 2016–19 and also actively engaged in several other international organisations including ICOM's International Committee for Documentation (CIDOC). His research interests are focused on transformative digital intermedia studies as a tool for critical engagement with media differences, especially the relationships between texts and maps as media of communication. He is also engaged in theoretical studies of modelling in the humanities as well as beyond.

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