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Digitalisation of Cultural Heritage: A Human Centered Approach

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Abstract: Heritage is a complex and diverse concept. It transcends tangible, natural or artificially created physical objects to intangible values. Whilst the former can be represented in software and analyzed from multiple perspectives, the latter is much more challenging to a) understand, b) represent, and c) to analyze and communicate. Intangible values and features of heritage are distinctly shaped and embodied in human experiences. It comes as no surprise that heritage and particularly intangible heritage is seen to reflect multiple meanings and values. This multiplicity creates significant challenges for software tools to work with, particularly for lay/ordinary citizens. There is strong evidence to show that digital technologies can largely help to sustain and communicate the intangible cultural heritage of nations and countries. Equally, increasingly studies show that digitalization introduces its own disadvantages. Part of the reason for this lies in the dominance of digital technology of the way intangible heritage is represented and communicated. A further compounding factor when using or developing digital technologies is when the heritage values spread across two distinct cultures from two geographically separate nations. We will report on the opportunities and barriers surrounding the use of digital technologies for grassroot and community level engagement with heritage participation in the cultural heritage through such software. In our research we aim to pursue a theoretically underpinned and human centered understanding of intangible heritage values. We outline this approach in a phenomenological underpinning. We report on some recent studies looking at how a phenomenological approach has helped improve understanding of heritage in cities with direct impact on in urban planning. We will next sketch a framework for developing more intuitive software that could enable users to enrich their appreciation and understanding of heritage. This research is work in progress from a collaboration between researchers from SINTEF one of Europe's largest research organizations, based in Norway, and the University of Aberdeen, Scotland.

Keywords: digitalization, intangible heritage, phenomenology, culture.

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