

Editorial: Re-thinking the future of semantic ambient media

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The term 'ambient media' is new in the field of media research in the context of smart and intelligent systems. As far the term was relating to advertising, but it's meaning goes far beyond. In ambient media, the natural environment is the media, and media objects are rendered throughout rather than on dedicated devices. Ambient media are 'intelligent' and react pro-actively to users—therefore we can refer to them as semantic ambient media. Ambient media underlie five basic principles: manifestation, morphing, intelligence, collaboration, and experience (see e.g. [1, 4, 5] or [3] for further reading). Within this special issue we focus on the investigation of ambient media and their characteristics in one article analyzing the other accepted five articles. Several articles adds either a human, technical, or philosophical viewpoint on ambient media.

The paper contributed by A. Scherp et al., entitled "A core ontology on events for representing occurrences in the real world" presents an ontology for the modeling of real-world events, and how they can be mapped to the digital overlay. B. Pogorelec et al. apply ambient media technology in a health care system, recognizing health problems automatically. The ambient assisted living system shall prolong the autonomous living of the elderly. P. Codognot et al. approach ambient media from an auditory viewpoint, and present a media installation, which generate sound spaces generated by self-organized agents. R.D. Vatavu et al. devote their research work to interactive surfaces and how emotional responses and

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interactions allow new modalities for self-expression and emotional communication. A. Lugmayr has a more theoretical approach towards ambient media. He discusses the aspect of intelligence and wisdom in ambient media by applying Peirce's categories as framework.

A very specific feature of this special issue is a sixth article, which discusses and analyzes several articles that compile this special issue to provide a red-line through the discussed issues. Additional background literature, as e.g. [7] acted as input for this specific article.

For further reading or joining actively the activities for making ambient media reality, we would like to refer to activities as the Ambient Media Association (see <http://www.ambientmediaassociation.org>), the Semantic Ambient Media (SAME) workshop series (see e.g. [2] or [6]), or the Nokia Ubimedia MindTrek Award (see <http://www.mindtrek.org/ubimedia>). We wish to give the reader new perspectives on this newly emerging field.

References

1. Lugmayr A (2007) Ambient media. *Novatica* 33(188):35–39
2. Lugmayr Artur, Stockleben Bjoern, Risse Thomas, Kaario Juha, and Laurila Kari, *Acm multimedia 2008: 1st workshop on semantic ambient media experiences (same2008) namu series*. pages–, 2008.
3. Lugmayr A, Risse T, Stockleben B, Kaario J, Laurila K (2009) Re-Discussion of the Notion of Semantic Ambient Media—Reviewing Submissions to the 2nd SAME 2009 Workshop. In: *Proceeding of the 2nd Workshop on Semantic Ambient Media Experiences (SAME 2009)*. *AmI 2009*, Salzburg, Austria
4. Lugmayr A, Risse T, Stockleben B, Kaario J, Laurila K (2009) Special issue on semantic ambient media experiences. *Multimedia Tools and Applications* 44(3):331–335
5. Lugmayr A, Risse T, Stockleben B, Laurila K, Kaario J (2009) Semantic ambient media—an introduction. *Multimedia Tools and Applications* 44:337–359. doi:10.1007/s11042-009-0282-z
6. Lugmayr Artur, Risse Thomas, Stockleben Bjoern, Kaario Juha, and Pogorelc Bogdan, editors. *Proceedings of the 3rd Semantic Ambient Media Experience (SAME) Workshop in Conjunction with AmI-10*, number ISBN 978-952-15-2474-5. http://webhotel2.tut.fi/emmi.forum/files/library/201011_SAME_Proceedings_Small.pdf, Tampere Univ. of Technology (TUT), Tampere, Finland, 2010.
7. Tscheligi M, Obrist M, Lugmayr A (2008) 6th European Conference, EuroITV 2008—Changing Television Environments. Springer, Salzburg, Austria



Artur Lugmayr Prof. Dr. Artur Lugmayr describes himself as a creative thinker and his scientific work is situated between art and science. Starting from July 2009 he is full-professor for entertainment and media production management at the *Department of Business Information Management and Logistics* at the *Tampere University of Technology (TUT)*: EMMi – Entertainment and Media Production Management (<http://webhotel2.tut.fi/emmi/web/>). His vision can be expressed as to create media experiences on future emerging media technology platforms. He is the head and founder of the New AMbient MULTImedia (NAMU) research group at the Tampere University of Technology (Finland) which is part of the Finnish Academy Centre of Excellence of Signal

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