

Preface

In recent years a growing number of researchers working in artificial intelligence, cognitive science, computer graphics, computer music, and multimedia have begun to explicitly address issues of “style” or connotative semantics in their work. While it is still difficult to precisely characterize these concepts satisfactorily (we know it when we see it), common denominators of much of this work are: an emphasis on manner rather than topic, a focus on affective aspects of expression and understanding, and a search for “dense” representations of meaning in which elements simultaneously symbolize multiple layers of meaning at once. Work in all media shares problems of formalizing notions of style and developing modeling languages that can represent differing styles. However, due to the widely varying technical requirements of work in different media, little communication has heretofore taken place between different “style research” communities.

The goal of this symposium, therefore, is to bring together researchers working on a wide range of style-related problems in computational frameworks, so that we may together explore possible commonalities in our work and create a more defined research community. We seek to generate discourse among researchers working with diverse media and approaches, and so move towards a better understanding of style in all its manifestations, by developing computational models and tools.

To facilitate these goals, the symposium will contain talks and discussions in several different modalities. We have a number of research presentations on a wide-variety of style-related problems, ranging from text analysis to playing poker, and from analyzing listener response to music to producing theatrical performances. To further stimulate discussion, there will be three panels: “Getting below the surface of style,” “Applications of style research in the real-world,” and “Developing community resources.” In addition we have two tutorial sessions on bases of style in specific contexts: one on cognitive linguistics by Joseph Goguen, and one on computer music by Roger Dannenberg.

We are also pleased to be hosting four invited talks. Harold Cohen will talk about style as an emergent property. Eduard Hovy will speak about approaching style from the standpoint of guided plan execution. Christopher Raphael will discuss work on systems that perform flexible musical accompaniment with live players, by listening to

and learning from the performance on-line. George Stiny will talk about issues related to stylistic attribution in collaborative contexts.

To help focus discussion during the symposium, we suggest that participants think and talk about some (or all) of the following challenge questions:

- Is there a general theory for style, which cuts across all kinds of human intellectual behavior? What is the relation between style and other forms of meaning (e.g. informational) in different media?
- Is there a general theoretical structure for context that informs style or connotation that can be applied usefully in disparate media? Are there lessons from your own work that may be generalizable across media or genre?
- In operational terms, what are useful models and effective algorithms of the process of learning and producing style, and how can such models inform our understanding of stylistic features in the resulting work?
- How is style explicitly discussed or implicitly understood in your main research community? How are stylistic distinctions learnt and transmitted to others within the community of recipients?
- How might we usefully model the social context of a work, as a resource for understanding its style, its meaning, and its effect? What are the processes affecting stylistic diffusion among members of a community? What properties of the social context may affect the transmission or evolution of distinctive styles?

Finally, this AAAI Fall Symposium on Style and Meaning could not have happened without the hard work of many people. In particular, we acknowledge with thanks our program committee, without whom this symposium would not have been possible: Roger Dannenberg, Graeme Hirst, Jussi Karlgren, Moshe Koppel, Rivka Oxman, Mine Ozkar, and James Shanahan. As well, we thank the invited and tutorial speakers for contributing greatly to this forum. Finally, we would like to thank Holly Yanco, Carol Hamilton, Corina Anzaldo, and the entire AAAI staff for organizing this fall symposium series, and helping to make it a success.

Enjoy the symposium!

– Shlomo Argamon, Shlomo Dubnov,
and Julie Jupp, Symposium Cochairs