

Séminaire International de Sémiotique à Paris (2023-2024)

Énonciation(s) et passions dans les territoires sémiotiques

ouverts par l'Intelligence Artificielle

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Andrea Valle (Université de Turin)

From grammar to text. A semiotic perspective on a paradigm shift in computation and its usages

Programming is indeed a relevant semiotic activity, spawning thousands of languages in 50 years and resulting in million of lines of written code. The whole digital revolution in this sense is still rooted in writing as a semiotic activity. Programming languages are semiotic systems that show an interesting twofold orientation: on one side, towards the machine that has to perform calculation based on strictly formal instructions; on the other toward the programmer and his/her community, so that a code can be also thought as a form of literary writing. Observed from this dual perspective, AI applications based on machine/deep learning do not present particular features. They are standard computer programs relying on the Turing/Von Neumann. As a matter of fact, this can be easily observed by taking into account available libraries (e.g. the well-known Tensorflow for the Python language). Yet there is an interesting epistemological difference. A distinction can be made between classical programming and machine learning. As the task for programming is always problem solving, in classical programming, the programmer has to input rules and data in order to gather answers in output. A machine learning approach requires a different epistemological wiring: the programmer inputs data and the required answers, while the software outputs the rules. This epistemological difference is orthogonal to the double-interpretation system required for computer languages mentioned above. In fact, the latter is still at stake. These two approaches to programming can be characterized from a semiotic perspective by referring to the couple 'grammar' vs 'text'. This relation between a certain machine behavioral state and the users might be thought as a form of "semethic interaction" involving different types of agencies, the latter defined in relation to negative feedback. While the term "semethic interaction" is used in the context of living beings, yet it seems interesting to investigate it in the context of generative AI. Regularities in the machine behavior, not strictly formalized, are detected by users so to interact with the machine itself. But on the other side, user behavior is captured by same machine that capitalizes it in order to adjust its behavior, thus leading to a multi-layered semiotic interaction.

Cristina Voto (Université de Turin)

Exploring Enunciation in Latent Space: Research Perspectives

My presentation aims to explore the enunciative conditions within the latent space of a machine learning computational model. Latent space refers to an abstract, multidimensional representation where data is compressed, capturing its underlying patterns, features, and structures. This spatiality enables models to perform various tasks, including classification, generation, and transformation, by encoding the essential characteristics of the data. Specifically, I seek to understand whether an automated computational model initiates its chain of meaning-making within the latent space. In this framework, I will examine not only the morphological-vectorial organization of the space but also the practices it involves and the possibilities it enables. This includes analyzing the interactive dynamics assigned to potential enunciative instances, the computational operations, and the inferential mechanisms required. By investigating these elements and referencing artistic examples, my goal is to provide a comprehensive understanding of this digital spatiality and its broader implications for computational semiotics.

Rossana De Angelis (Université Paris-Est Créteil)

L'IA au prisme de la rédaction numérique : pratiques, normes, défis

Pour comprendre les enjeux sémiotiques des IAG rédactionnelles, nous devons interroger à la fois les modalités de génération et le corpus traité pour l'entraînement des machines. Par exemple, ChatGPT-3-5 traite un corpus d'écrits récoltés jusqu'en décembre 2021, ceux de ChatGPT-4 s'arrêtent en avril 2023. Quelles sont les caractéristiques rédactionnelles des écrits dont se compose ce corpus ? Les écrits numériques, notamment ceux produits par des rédacteurs professionnels, répondent à des normes éditoriales précises afin de s'adapter aux dispositifs de circulation et de lecture en environnement numérique, ainsi qu'aux objectifs de communication propres aux genres de discours concernés, et deviennent des *modèles normatifs* de la rédaction en contexte numérique. La plupart des écrits soumis au traitement automatique par les IAG rédactionnelles respectent ces normes. En analysant la production des IAG rédactionnelles au prisme des pratiques de rédaction numérique, nous pouvons alors comprendre les raisons de certaines formes d'« hallucinations » qui permettent de comprendre les enjeux sémiotiques de la rédaction numérique. Nous allons donc proposer des études de cas qui nous obligent à revenir sur deux notions sémiotiques capitales : celles de *référence* et de *pertinence*.