Ethical Orientation through Systematics: A Care Robot Matrix and Typology of Trust and Trustworthiness

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The increasing integration of care robots into clinical and caregiving contexts marks a key intersection of technological innovation and ethical reflection. Robots such as Care-O-bot 4, Lio, GARMI, and Pepper are already being piloted, moving the discussion beyond mere visions of the future. While current debates emphasize efficiency, workload and (ambivalent) cost reduction, the issue of trust and trustworthiness is emerging as central to the ethical legitimacy of robotic care.

This presentation introduces a systematic typology of trust, distinguishing functional, institutional, relational, and reflexive dimensions. Building on philosophical work (e.g., Sullins' differentiation of thin trust, thick trust, and ethical trust), the typology highlights how trust in care settings must go beyond technical reliability to address vulnerability, dignity, and normative expectations. The concept of ethical trust is understood as condition to stabilize interactions and to contribute to ethical responsibility and human flourishing.

Complementing this, we present a "care robot matrix" that maps commercially available systems by function (e.g., logistics vs. social interaction) and associated trust dimensions. This reveals that entrusting a robot always entails also trust into institutions, developers, and regulatory structures- This additional condition allows to make hidden trust relations explicit and assessable.

By linking both, typology and matrix, we offer a systematic tool for ethical orientation: It asks for clarifying conditions under which robots may be considered trustworthy, how to identify limits to technological delegation in caregiving, and allows to shift the focus from efficiency to responsibility, legitimacy, and the preservation of care as a human-centered practice.