

Conceptions of Digital Humanities

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Abstract. "Digital humanities" has three conceptions. The first conception broadens the scope of the concept to include the various aspects of using digital technologies in the humanities. The second conception narrows the scope of the concept to the metaknowledge of humanities. The third conception zooms into the mediating of knowledge in the humanities. None of the three conceptions constitutes a distinct field of knowledge. Still, they do establish academic frameworks for studying common issues.

Diversified phenomena. While reviewing the literature one can see that the term refers to studies that explore diversified phenomena and are part of diversified fields: history, linguistics, art, computer science, information science, and so on. For example, a study that implements digital technology for modeling ancient Egypt is part of *history* since it explores ancient civilizations. A study that compares between two computer generated paintings is part of *digital art*.

Examples. To clarify this point, here are four exemplary studies that explore phenomena related to computer-generated paintings:

- **Computer science.** A study that focuses on the software engineering (programming) of digital works of art is part of *computer science*.
- **Digital art.** A study that focuses on the aesthetic qualities of the paintings is part of *digital art*.
- **Metaknowledge of digital art.** A study that explores the use of image editors by artists is part of *digital art*. To be precise, it is part of the metaknowledge of *digital art*.
- **Information science.** A study that focuses on using information systems for preserving knowledge in the field of *digital art* is part of *information science*

First conception. "Digital humanities" is usually defined as the study of the use of digital technologies in the humanities. This broad definition covers diversified studies that share a common interest, using digital technologies in the humanities. It is an umbrella name for studies belong to different fields, rather than a distinct field of knowledge.

Humanities vs. technologies vs. metaknowledge vs. mediation. The studies, which are covered by the term "digital humanities", are divided into four general groups.

- **Humanities.** The first group focuses on humanities-based phenomena. These studies are part of the various fields of humanities (e.g., philosophy, linguistics, literature, art).
- **Technologies.** The second group focuses on digital technologies per se. These studies are part of *computer science*.
- **Metaknowledge.** The third group focuses on the metaknowledge of humanities. These studies deal, for example, with computer modeling, and information systems.
- **Mediation.** The fourth group focuses on the mediating of knowledge in the humanities. These studies, which are part of the metaknowledge of humanities, are also part of *information science*.

Second conception. Zooming into the metaknowledge of humanities sets the second conception of "digital humanities." *Digital humanities* is the study of the use of digital technologies for exploring the metaknowledge of humanities. It is an umbrella name for studies belong to different fields, rather than a distinct field of knowledge.

Subordinate fields. The conception represents two groups of subordinate fields. The first group is centered on the metaknowledge aspects of humanities, among them *digital humanities theory*, *digital humanities research*, *digital humanities education*, and *digital humanities information*. The second group is centered on the various fields of humanities, among them *digital philosophy*, *digital linguistics*, *digital literature*, *digital history*, and the like. These fields can be viewed either as subfields of their main fields (e.g. philosophy, linguistics, literature) or as subfields of *digital humanities*.

Third conception. Zooming into the mediating aspects of humanities sets the third conception of "digital humanities." *Digital humanities* is the study of the various aspects of using digital technologies to mediate knowledge in the humanities.

Information science is the study of the mediating perspectives of human knowledge. In a nutshell, it connects resources and users. For this very reason, the third conception narrows the scope of *digital humanities* to be part of *information science*. In a nutshell, it connects knowledge formulated by scholars in the humanities and users by means of digital technologies. This includes documenting, representing, organizing and mapping, communicating, storing and preserving, searching and retrieving, creating knowledge systems, and using and abusing knowledge in the humanities.

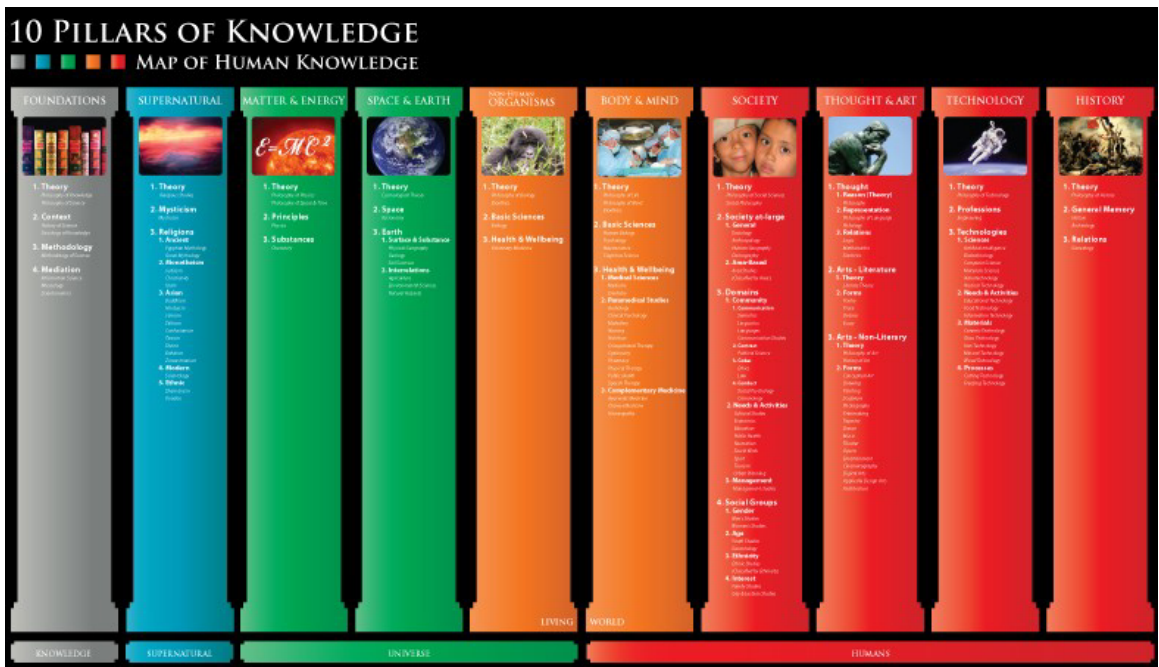
Subordinate fields. This conception represents two groups of subordinate fields. The first group is centered on the processes related to the mediation of knowledge (e.g. representation, organization, and preservation). These include, for example, *digital knowledge representation*, and *digital preservation*. The second group is centered on the various fields of humanities, among them *digital philosophy*, *digital linguistics*, *digital literature*, *digital history*, and the like. These subfields can be viewed either as subfields of their main fields (e.g. philosophy, linguistics), or as subfields of *digital humanities*.

Counter fields. *Digital humanities'* (DH) counter fields are digital natural sciences (DNS), digital life sciences (DLS), digital social sciences (DSS), and digital technology studies (DTS). Each of these five interrelated fields has, *mutatis mutandis*, three conceptions and different foci. Together they are composed of 15 conceptions.

Indistinct fields. The 15 conceptions establish 15 academic frameworks for studying common issues related to digital technologies. Still, they do not constitute distinct fields of knowledge. Fields of knowledge are defined based on the phenomena they explore. The 15 conceptions are not mutually exclusive. They do not represent mutually exclusive phenomena; namely, none of the 15 conceptions constitutes a distinct field of knowledge.

Map of human knowledge. What are the logical relations among *digital humanities* and other fields of human knowledge? 10 Pillars of Knowledge (www.success.co.il) is a systematic map of contemporary human knowledge. According the 10 pillar map human knowledge is composed of 10 pillars:

- **Foundations** studies human knowledge.
- **Supernatural** concerns mysticism and religion.
- **Matter and energy** explores the basics of the physical world.
- **Space and earth** explores our planet and outer space.
- **Non-human organisms** explores the non-human living world.
- **Body and mind** explores the human body and the human mind.
- **Society** deals with the various aspects of human social life.
- **Thought and art** studies the products of the human intellect and the arts.
- **Technology** studies the products of human creativity that are designed for practical aims.
- **History** encompasses human history.



10 Pillars of Knowledge, 2008. Source: <http://www.success.co.il/knowledge/index.html>

The first conception of *digital humanities* encompasses subfields presented in pillars 1 (foundations), 2 (supernatural), 7 (society), 8 (thought & art), 9 (technology), and 10 (history).

The second conception of *digital humanities* encompasses subfields presented in categories 1 (theory) of pillars 8 (thought and art), 2 (supernatural), and 10 (history). Alternatively, these subfields can be placed within the various humanities.

The third conception of *digital humanities* encompasses subfields that are part of *information science*, which is placed in category 4 (*mediation*) of pillar 1 (foundations). Alternatively, these subfields can be placed within the various humanities.

Theoretical agenda. The three conceptions of *digital humanities* do not constitute distinct fields of knowledge. Still, they do establish academic frameworks that share common interest. The literature comprises numerous examples of studies that "formally" related to the digitization of knowledge in the humanities, but they do not focus on the unique attributes of the media. This paves the way to set research agendas and establish

the theoretical foundations of *digital humanities* either as an umbrella name for studies that belong to diversified fields, or as a subfield of *information science*. The essence of digitization and one of its fundamental elements is automatisisation. I expect to see studies that strive to solve automatization-based problems and accomplish automatization-based challenges. Researchers should identify the fundamental and unique qualities of the media and explore their invaluable contributions to advance knowledge in the humanities.