TURNS IN INFORMATION SCIENCE
by Jenna Hartel

This diagram summarizes theoretical "turns" that have occurred within Information Science. They are further described in the paper Turn, Turn, Turn (Hartel, 2019), and a video on the same theme is at the YouTube channel, INFIDEOS. The starting point is the "physical paradigm," and then the turns follow a loosely chronological order:

1.THE PHYSICAL PARADIGM

For most of its history, Information Science has been concerned with physical access to books and documents. In the 1960s, with the advent of digitized collections, research shifted to information retrieval using new computer technologies. This entire era, with its focus on information artifacts and systems, has been called the physical paradigm.

3.THE AFFECTIVE TURN

In the affective turn, the information seeker's emotional experience became a matter of keen interest. This new emphasis was sparked by Constance Mellon's idea of library anxiety, and Carol Kuhlthau's seminal investigations of the emotional roller-coaster for high school students as they do a course writing assignment. Likewise, Elfreda Chatman's holistic ethnographies of the information worlds of marginalized populations struck novel, poignant, compassionate chords. This turn heralded the ascent of concomitant methods, such as ethnography, for accessing the subjective realm. Forevermore, the affective turn instilled a sensitivity, intimacy, and humanity into the heart of Information Science.
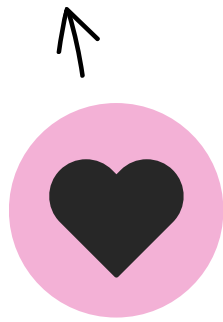
5.THE SOCIO-COGNITIVE TURN

In the 1990s, information came to be seen as embedded in social, organizational, and professional contexts. This socio-cognitive turn shifts attention from internal knowledge structures to the outward and social construction of knowledge within communities. A crusader for this turn is Birger Hjorland, the architect of domain analysis, which orients to information phenomena within academic disciplines. Any research into professions, trades, academic disciplines, hobbies, or other collectives aligns with this turn. Today, the socio-cognitive turn is very popular and has been absorbed into the accepted wisdom of Information Science.
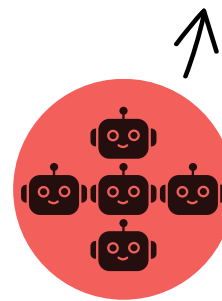
7.THE CRITICAL TURN

In the 2000s there was a critical turn in Information Science. It unified all approaches to information that aimed to expose and challenge dominant social economic and political structures. The critical turn creates space for looking at information through lenses such as Marxism, critical race theory, feminist theory, post-colonial theory, cultural theory, gender and queer theory, and technoscience perspectives among others. The 2020 murder of George Floyd and America's subsequent reckoning with systemic racism and other cultures of discrimination, fortified the momentum and urgency of this turn. The critical turn in Information Science may spawn a distinct discipline known as Critical Information Studies.

2.THE COGNITIVE TURN

In the 1980s, a cognitive turn occurred in Information Science. It upheld the idea that an information system should reflect the thought world of the user, which must therefore become the foremost object of inquiry. This turn was anchored and amplified by a watershed ARIS&T chapter on "Information Needs and Uses" by Brenda Dervin and Michael Nilan, which contrasted the traditional physical paradigm with an alternative user-centred approach. Quintessential concepts of this turn are Sense-making, a theory and methodology to examine what happens when an individual's internal sense is exhausted, and Nicholas Belkin's anomalous states-of-knowledge. The cognitive turn shifted Information Science from its technical stronghold of information retrieval to the social scientific study of human information behavior.

4.THE NEO-DOCUMENTARY TURN

In the 1990s, a neo-documentary turn brought Information Science back to its roots in the European Documentation movement and the work of its luminaries, Paul Otlet and Suzanne Briet. Participants in this turn rally around Michael Buckland's idea of information-as-thing. Neo-documentalists in LIS focus upon the properties and types of documents, their social and cultural construction within many different contexts, and their changing nature in the digital age.

6.THE EVERYDAY LIFE TURN

Proponents of an everyday life turn sought to understand and celebrate information phenomena associated with routine or pleasurable and profound life experiences, wherein information phenomena were hypothesized to be different. This turn was sparked by Reijo Savolainen and Anders Hektor, whose work performed three necessary conceptual maneuvers: structuring time within everyday life, teasing apart life activities from information activities, and expanding information behavior beyond seeking to include creating, manipulating, and sharing information. Thanks to this turn, a plethora of familiar, entertaining, and meaningful experiences became relevant to Information Science.

8.THE EMBODIED TURN

An embodied turn is happening in Information Science right now. It challenges our fields long-standing preoccupation with documents, information systems, and the mind. After all, our senses are our primary information acquisition channels. Our muscles have memories that may never coalesce into thoughts, words or narratives. There is a great intelligence in the way we simply live and socialize. Our bodies, through their facial expressions, gestures, form and adornment, project much information about ourselves, including our moods, health, identities and social and cultural affiliations.