Boldi et al. (2009)	Liu et al. (2010)
Used cognitive aspects of searchers issuing the query:	Used linguistic properties of two successive queries:
Generalization: user wants broader information than was obtained from the current search	Generalization: successive queries contain at least one term in common; second query contains fewer terms than first query
Specialization: user narrows down the current search	Specialization: successive queries contain at least one term in common; second query contains more terms than first query
Mission Change: user changes the search topic to an entirely different one	Word Substitution: successive queries contain at least one term in common; second query has same length as first query, but contains some terms that are not in first
Parallel Move: user modifies the current query to change the search aspect with the same context Learners are the also	query
knowledge producers, and discerning knowledge discoverers / navigators	Repeat: successive queries contain exactly the same terms, but the format or ordering of these terms may be different
Error Correction: user's search intent does not change in the period before and after reformulation; examples are correcting	New: successive queries do not contain any common

Generalization and Specialization are identical in both taxonomies. Parallel Move can contain Word Substitution, Repeat, or New QRTs. Mission Change will generally have New QRTs. Error Correction will possibly have Repeat or Word Substitution.

terms

a misspelled term and/or performing a query paraphrase