Appendix A: A Review of Literature related to Information Foraging Theory (IFT)

Source	Context	Findings	Relevance to IFT
Dennis and Taylor (2005)	Information search on websites	Increased time and effort caused by acceptable web delays provoke increased information search.	Since response time delays increase the marginal cost to move among pages, foragers will gather more information on each page to maximize benefit-to-cost ratio.
Dwairy, Dowell, and Stahl (2011)	Medical evidence search of general practitioners	General practitioners trade time-consuming evidence-based information sources for sources with a higher information reward per unit search time.	Foragers tend to minimize the time wasted in an unsuccessful patch.
Fang, Hu, Chau, et al. (2012)	Information search on websites	Develops three data-driven metrics – power, efficiency, and directness – that consider Web structure, usage, and content data to measure a website's navigability. Highlights the importance of the efficiency and ease of finding information.	A person moves through different states toward the goal state by choosing the most cost-effective paths and taking advantage of the cues available.
Galletta, Henry, McCoy et al. (2006)	Information search on websites	Website delay, familiarity and breadth all affect users' search performance, with breadth and familiarity dampening the effects of delay on performance.	Delay raises the cost of navigation and reduces the scent by pushing the target further into the future. Breadth and familiarity reduce the number of required clicks and hence reduce the total cost.
Grigoreanu, Burnett, Wiedenbeck et al (2012)	End-user debugging behavior	Derives a sensemaking model for end-user debugging behavior. Information foraging is prevalent during end-user debugging.	Constructs such as scent can be applied to the design of spreadsheet formulas, layout, and structure to support information foraging by end-user debuggers.

Source	Context	Findings	Relevance to IFT
Heer and Agrawala (2008)	Collaboration tasks in visual analysis environments	Presents design considerations for asynchronous collaboration in visual analysis environments. Interactive visualization should support social interaction which is key to the sensemaking process.	The first phase of sensemaking is information foraging. Visualizing aggregate foraging behaviors is similar to the scent trails left by ants foraging for food.
Hoare and Sorensen (2005)	Information browsing on websites	Graphical presentations have an advantage over ranked lists in assisting users with browsing an article collection.	Relationships between elements cannot be determined in a ranked list, hence identifying relevant patches requires high search cost.
Katz and Byrne (2003)	Information search on websites	Information scent influences the decision whether to browse or to search a site.	A site with poor information scent results in users anticipating browsing to be a more costly strategy than searching.
Lawrance, Bellamy and Burnett (2007)	Source code navigation by professional developers	IFT is a significant predictor of developers' maintenance behavior such as fixing a bug and adding new functionality.	Linguistic knowledge and analysis of linguistic relatedness and salience are fundamental to user navigation.
Lawrance, Bellamy, Burnett et al. (2008)	Source code navigation by professional developers	Presents a model of programmer navigation during software maintenance, and suggests that source code navigation can be enhanced by highlighting links in class files with high scent.	Scent can be used to analyze the efficacy of environments, tools, and source code.
Lawrance, Bogart, Burnett, et al. (2013)	End-user debugging behavior	Constructs of scent and topology provide enough information to describe and predict programmer navigation during debugging.	IFT can be mapped to the domain of debugging, with a bug treated as the "prey", words in the environment and source code as "cues", and navigational affordances as "topology".

Source	Context	Findings	Relevance to IFT
Lawrance, Burnett, Bellamy, et al. (2010)	End-user debugging behavior	Presents a new information foraging model called PFIS2 that models information seeking with potentially evolving goals in the domain of programming debugging.	Although previous foraging models could in principle change the goal, the goal is an externally specified parameter to the model that does not change as the model runs.
Liu Mulholland, Song et al. (2010)	Content-based image retrieval behavior	Proposes a new user classification model for understanding user interaction with content-based image retrieval.	The three criteria in the user model, i.e., information goals, search strategies, and evaluation thresholds, can be explained by the three models in IFT, i.e., the scent model, the patch model, and the diet model, respectively.
Moody and Galletta (2015)	Information search on websites	Information scent can reduce the amount of stress that consumers experience when seeking information under time constraints.	Higher information scent indicates the presence of relevant information and reduces effort. When items are more easily found, users will feel less stressed.
Mulholland Zdrahal and Collins (2008)	Exploratory search of online museum content	Two new technologies, exploratory search and semantic web, can support more effective use of online museum content.	Exploratory search reduces the gap between feeding in the current patch and moving to a new patch. Semantic web technologies explicate the informational value of patches, therefore reducing uncertainty and guiding users' navigation choices.
Niu, Mahmoud, and Bradshaw (2011)	Source code navigation	Develops a unified code navigation theory, i.e., developers are well adapted to the information in the code space, and they have evolved the strategies to maximize the gains of useful information per unit cost.	People forage for information along patches of resources and decide on what information to consume and what to ignore based on profitability and prevalence of patches.

Source	Context	Findings	Relevance to IFT
Olston and Chi (2003)	Information browsing and search on websites	Introduces a novel interface that enables users to interpolate smoothly between searching and browsing to locate content more quickly than by either searching or browsing alone.	The new interface assists browsing by adding new supplemental cues tailored to users' needs, which convey appropriate scent.
Pan and Fesenmaier (2006)	Online tourist search (vacation planning)	Online tourists tend to use information hubs containing many links to other authoritative websites regarding the designated destinations.	Information foragers tend to look for information in clusters to minimize inter-cluster seeking cost.
Piorkowski, Fleming, Scaffidi et al. (2012)	Recommender systems design for debugging	Designs a variety of recommender algorithms to help people look for information while debugging source code.	Reactive IFT indicates that a software developer's recent navigation actions can be used to infer the goal.
White and Drucker (2007)	Information search on websites	There are dramatic differences in variability in the interaction within and between users, and within and between the search queries they submit.	IFT mainly focuses on cognitive simulations of user behavior, but does not fully address behavioral variability.

Appendix B: Screenshot of the profile page (of a socially endorsed individual)

Note: Username and profile pictures are masked to preserve confidentiality.

Appendix C: Screenshot of a restaurant information page with product tags and socially endorsed people

Notes:

1. The sections of “restaurant name, location and contact information”, “User review”, and the map were provided for all the four conditions.
2. The section of “Tags” was only provided in the conditions with tags. The number following each tag indicated the number of users who had assigned the tag to the product, i.e., the popularity of this tag for this restaurant.
3. The section of “Socially Endorsed People” was only provided in the conditions with socially endorsed people.

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