Ram's Search for Sita in the Ramayana: Information Seeking in an Ancient Indian Epic

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Abstract. *In understanding a person's information seeking behavior and choice of information sources, it becomes very important to understand the context surrounding the search. This context gives rise to the information need and leads a person to look for information. Research in information seeking behavior, while concentrating on system-and-person centric research, has, so far, left out studying how information seeking behavior was documented in historical and mythological records, in religious and spiritual texts and in major epics of the world. In this theoretical study, frameworks of context and source choice when looking for information will be applied to a detailed examination of Rām's inquiry on the whereabouts of his missing wife Sītā in the Rāmāyaṇa, an ancient epic dating back to 5th-to-4th century B.C. The study should shed light on recorded information seeking behavior in one of the oldest epics of the world, and help towards understanding the historical evolution of information seeking behavior in context.*

Keywords. Information seeking behavior, context, source choice, religion and information, Ramayana, Ram, Sita, search.

Introduction

The context of a person's information seeking behavior has been variously understood by researchers as something that surrounds, is socially constructed or is inherent to the seeker. The environment of a seeker's shared context plays upon the seeker to effect a situation requiring a need for information (see e.g. Agarwal, 2011; Cool, 2001; Courtright, 2007; Dervin, 1997; Dourish, 2004). The seeker then approaches a source (personal or impersonal) for this information (see Agarwal, Xu and Poo, 2011; Xu, Tan, and Yang, 2006; Zimmer, Henry and Butler, 2008). Here, a source can be anyone or anything that provides a person with required information e.g. a book, a manual, a search engine, a colleague, etc. Contextual factors affecting choice of information sources are important considerations in understanding information seeking behavior (Agarwal, Xu and Poo, 2011).

Research in information seeking behavior initially began with a system-centered focus (studies of channels and systems), but in the last few decades, focus has also shifted to understanding the user, and how the users goes about looking for information once a need for information arises (see Case, 2007 for a review). It is in this user-or-person-centered focus on information seeking behavior that questions of context and source choice become increasingly important. However, the focus has largely involved coming up with models and frameworks of information seeking and studying task-based information seeking behavior either in workplaces or everyday-life information seeking (Savolainen, 1995). For example, Kuthlau, 1991 show a series of affective stages through which people are thought to move as they are looking for information. She describes six stages in the search process – initiation, selection, exploration, formulation, collection, presentation and assessment. For each stage, she describes the affective (feelings), cognitive (thoughts) and physical (actions) dimensions. In the first stage of initiation, the feelings are those of uncertainty, thoughts vague and the actions are those of seeking or looking for information. See Kuhlthau (1991) for a description of all the stages. See Wilson, 1999 and Case, 2007 for a review of different models and frameworks. Courtright (2007) provides a good review of studies in both types of settings and how they shape context. Not much work has been done in studying how information seeking behavior was documented in historical and mythological records, in religious and spiritual texts and in major epics of the world and how the documented records relate to theories and concepts of information seeking in context.

The Rāmāyaṇa is one of the two major epics in Hinduism. It was first written in Sanskrit and dates to approximately the 5th-to-4th century B.C. It depicts the duties of relationships and consists of 24,000 verses. The epic is central to the cultural consciousness of India, and has influenced many other countries such Nepal, Indonesia, Cambodia, Thailand, etc. It tells the story of Rām, whose wife Sītā is abducted by the demon king Rāvaṇ and taken to Lankā, a faraway island.

When looking for information on the whereabouts of Sītā, Rām asks the trees, the forest, the animals, a dying vulture, etc. (impersonal and personal sources of information). Hanumān comes to Rām's aid (a personal source) and eventually helps locate Sītā.

In this theoretical study, frameworks of elements of context and source choice when looking for information will be applied to a detailed examination of the search for Sītā in the Rāmāyaṇa. The study should shed light on recorded information seeking behavior in

one of the oldest epics of the world, and help towards understanding the historical evolution of information seeking behavior in context.

Literature Review and Theoretical Lens

When we try to search for the keyword 'apple' on Google, the first series of links is overwhelmingly biased towards a company by the name of 'Apple' and the popular products it sells. If I'm an apple farmer looking for information on my produce, these links are clearly out of context. This is because the search system does not easily understand my context of looking for this information. A great deal of research on information seeking behavior, human-computer interaction and user studies has been talking about context with the hope that we will be able to design search systems which are better able to take context into consideration. In a 2009 paper, Agarwal, Xu and Poo present the contextual identity framework – a framework by which they try to delineate the boundaries of what this context might mean. They primarily define three views of context – 1) personal context 2) shared context and 3) context stereotype (see Figure 1).
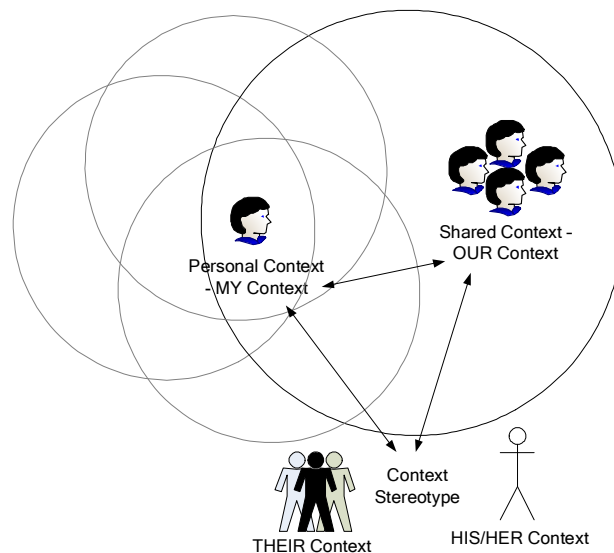

Figure 1 Contextual Identity Framework (Agarwal, Xu and Poo, 2009)

According to Agarwal, Xu and Poo (2009), personal context is what a seeker sees as 'my' context, is subjective and resides in the mind of the seeker i.e. the view of context from the point of view of the seeker. This could include variables pertaining to the seeker such as the seeker's prior domain knowledge, age, gender, etc. Shared context is made up of shared norms and social influences, where the degree to which a seeker identifies with a

source (and thus decides to seek information from it) depends on the degree to which the seeker sees this source as part of his or her shared context (Agarwal, 2011). A group of employees working in a team, people of a certain location, ethnicity, people belonging to a certain profession, etc. can all, to varying degrees, see themselves as part of a shared context. Thus, shared context is the view of context from the point of view of the seeker as part of a group or affiliation that the seeker identifies with. Context stereotype refers to seeing context as objective and made up of the factors and environment that surround the seeker e.g. the learning environment, culture, historical events leading up to a task or situation which prompts a seeker to look for information, etc. This is a view of context where a person looks at or studies the context surrounding someone else. Thus, looking from the outside, context is typically seen as the 'environment' or 'that which surrounds' a person who is looking for information (Courtright, 2007; Agarwal, Xu and Poo, 2009).

Figure 2 Workflow of interaction among the different elements of Context (Agarwal, 2011)

Agarwal, in a recent paper presented at the iConference in Seattle (Agarwal, 2011), takes
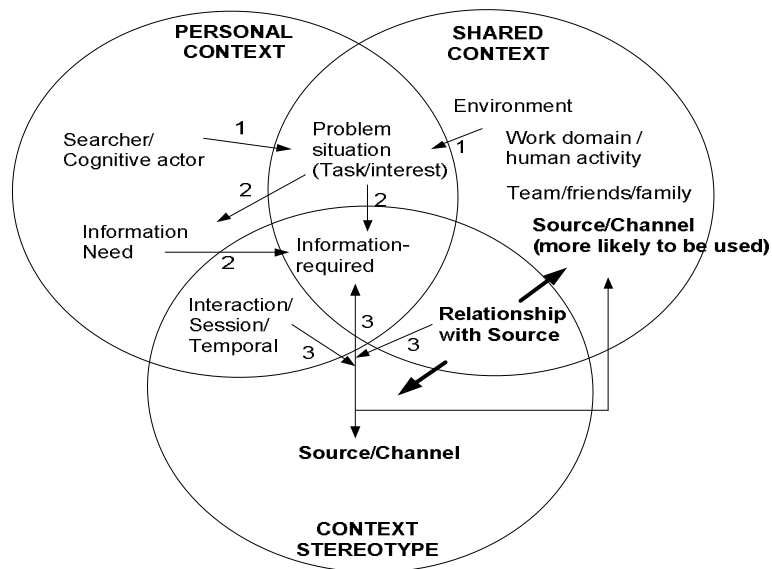
this further and shows the workflow of interaction between different elements in the three views of context (see Figure 2). He writes, "The environment of a seeker's shared context plays upon the seeker or cognitive actor (personal context) to bring about a problem situation (interaction between personal context and shared context) requiring a need for information (which is part of the person's personal context as it resides in the person's

head). This gives rise to knowledge or information (interaction between the three views of context) that needs to be sought from a source (context stereotype or shared context, depending upon the level of closeness with the source). The seeker then approaches a source (personal or impersonal) for this information. Depending upon the interaction between the seeker and the source, and the relationship shared by the seeker and the source, the source passes the knowledge sought to the seeker." (Agarwal, 2011).

Whether a seeker decides to place an information source in the personal context (here, the seeker is the same as the source e.g. a person trying to remember something based on past experience), shared context or the context stereotype depends on the degree to which the seeker identifies with the source. Thus, relationship with the source becomes an important variable here (Xu, Tan and Yang, 2006; Agarwal, Xu and Poo, 2011 have studied this variable). For human or interpersonal sources, there can be different aspects to this relationship such as *social risk* e.g. embarrassment, loss of face, revelation of incompetence or *social benefit* (e.g. relationship building, making an impression) and other factors such as *willingness to share* and *level of closeness* (Agarwal, 2011). For impersonal sources such as library or search engines, factors that help determine whether the seeker sees the source as part of his/her shared context can be *ease of information extraction*, *comfort level in using the system*, the searcher's *system-knowledge*, etc. will determine his/her level of comfort in using an impersonal source such as an online search engine or a knowledge repository (Agarwal, 2011).

While choosing sources when faced with an information seeking task, whether a seeker will want to use a particular source or not will depend on whether the seeker sees the source as part of his or her shared context i.e. whether the seeker is familiar with the source or has a high level of comfort with it. If a seeker has a low comfort level in using a source or an unfavorable relationship, the source or the channel is unlikely to make it to the seeker's shared context, and has lower chances of being used, unless the person goes for least effort, as opposed to source quality, as posited by Zipf (1949)'s principle of Least Effort (Agarwal, 2011).

Agarwal (2011) also looks at the ways in which sources can be classified:

- *[inter]personal and impersonal* (also referred to as relational and non-relational in literature on source choice) (also see Agarwal, Xu and Poo, 2011; Xu, Tan, and Yang, 2006; Zimmer, Henry and Butler, 2008). Here, interpersonal or relational

refer to human sources such as colleagues, friends, etc. and impersonal or non-relational sources refer to sources such as search engines, books, knowledge management repositories, etc.

- *Synchronous or asynchronous*, depending on the immediacy of feedback or synchronicity one receives from the source (discussed in the theory of media synchronicity by Dennis and Valacich, 1999). E.g. a phone or a chat would be a synchronous source or a channel while email would be an asynchronous one.

- *Physical or electronic*. Here, physical can mean face-to-face, printed books/manuals, etc. and electronic can be online sources or printed materials available online in the form of PDF files, etc.

Gray and Meister (2004) also distinguish between *dyadic* information sourcing (dialogue between one seeker and one source), *published* information sourcing (one published source read by many seekers) and *group* information sourcing (many sources exchanging information with many seekers).

Agarwal, Xu and Poo (2011) conducted a survey of 352 working professionals in Singapore to study the contextual factors affecting the use of different types of sources by information seekers in a work environment. The variables of context they studied included:

- Variables of the task or environment – task importance, task urgency, task complexity

- Variables pertaining to the source – source quality, access difficulty, communication difficulty

- Variables pertaining to the seeker-source relationship – inherent lack of comfort

- Control variables pertaining to the seeker – seeker's learning orientation, task self efficacy, tenure in the role, tenure in the organization, gender, age, education

- Control variables pertaining to the environment – favorable learning environment, size of team

Their findings suggest that source quality and access difficulty are important antecedents of source use, regardless of the type of source. Moreover, seekers place more weight on

source quality when the task is important. Other contextual factors, however, are generally found less important to source use.

The discussion above will be used as a theoretical lens to guide the case of Rām looking for information on the whereabouts of Sītā in the Rāmāyaṇa.

Methodology

The methodology used in this paper can be viewed in two ways: 1) as a purely theoretical exercise using the above discussion on context and source choice in information seeking behaviour as a theoretical lens or 2) as an interpretive case study (Walsham, 1993) using secondary data. The case study approach allows the exploration of unforeseen relationships and offers better insights into the inter-dependencies among the factors captured in the study (Benbasat, Goldstein and Mead, 1987). Secondary data analysis methods (Finlayson, Egan and Black, 1999) were employed for an in-depth interpretive analysis on the data collected on Rām's search for Sītā. This involves the re-examination and use of previously collected data and is employed by researchers to re-use their own data or by independent analysts using previously collected qualitative data (Herron, 1989). Using both case research and secondary data facilitated the reconstruction of the case retrospectively.

Rāmāyaṇa as part of cultural ethos. However, the data that is used is not just from text, but has been part of the cultural ethos that the author has been brought up in as part of his formative and growing up years. Hindus revere Lord Rām and worship him as an avatar of the Lord Viṣṇu, who came down to earth as a human to destroy evil and to demonstrate how to live the life of an ideal man. Mohandas Gandhi, the father of the Indian nation and revered as a mahātmā or great soul, held Rām as an ideal and tried to model his life after his, while also holding Jesus Christ as a great example of sacrifice. The Hindi version of the Saṃskṛt Rāmāyaṇa by Vālmīki was one of the textbooks in my Hindi class during Grade V or VI. The Indian television series on the Rāmāyaṇa in 1987-1988 by Rāmānand Sāgar became hugely popular on Doordarshan channel and the actors were almost revered as deities. I also watched with great interest a newer version of the series from 2008-2009 produced by Sagar Arts and aired on the NDTV Imagine television channel in India, while carefully trying to draw lessons to emulate in life. One doesn't need to try very hard to draw lessons – the story is extremely appealing and teaches one to respect relationships while following one's duty in life.

Secondary data sources. The following sources have helped in the summary of the case and findings – 1) my own impressions and knowledge of the Rāmāyaṇa; 2) Wikipedia article on the Rāmāyaṇa (Wikipedia-Ramayana, 2011); 3) Romanized edition of the Rāmacaritamānasa by Gosvāmī Tulasīdās, a 16th century saint (Gita Press, 1968); 4) a simplied prose form geared towards a western audience and based on Vālmīki's original Rāmāyaṇa (Gaer, 1954); 5) Valmiki's Ramayana (Rao and Murthy, 2009), among others. All these helped provide rich data as suggested by Klein and Myers (1999). Thus, the collection of data from different sources provided triangulation and increased the reliability of the research (as recommended by Yin, 2002 and Orlikowski, 1993).

Research Question. The research question that this qualitative case study attempted to address is, "How are the notions of context and source choice in information seeking behaviour applied in an ancient Indian epic?" The case is the Rāmāyaṇa and the unit of analysis is part of the story where Rām searches for Sītā after she is abducted by an evil demon king.

Transliteration. For writing Sanskrit names and words, the International Alphabet of Sanskrit Transliteration (IAST) was employed, which helps romanize Indic scripts without any loss of information. Google transliteration (2011) was used to first convert Roman script to Devanāgarī. Sanskrita-IAST (2009) was then used to convert the Devanāgarī text to IAST. E.g. the word Sanskrit is converted to the Devanāgarī संस्कृत, which is then converted to the IAST Saṃskṛt.

The Case

The Rāmāyaṇa is one of the two major epics in Hinduism. It was first written in Saṃskṛt and dates to approximately the 5th-to-4th century B.C. It depicts human duties as they apply to relationships and consists of 24,000 verses. The epic is central to the cultural consciousness of India, and has influenced the cultures of many other countries (Wikipedia-Ramayana, 2011). Rāmāyaṇa depicts the story of Rām in 7 major kāṇḍas or episodes/chapters/books – Bāl Kāṇḍ (Rām's youth), Ayodhya Kāṇḍ (the banishment), Araṇya Kāṇḍ (the abduction of Sita), Kishkinda Kāṇḍ (alliance with the King of the Monkeys),Sundar Kāṇḍ (the beautiful story), Yuddh Kāṇḍ (the war at Lankā), and Uttara Kāṇḍ (the book that was added). The English titles for each chapter are as used by Gaer (1954).

Joseph Gaer (1954) writes, "..to the Hindus, who have kept this epic alive in their hearts and imagination for so many centuries, it is more than a great poem dealing with the adventures of Prince Rama. It is part of their sacred scriptures. For to them it is the story of their god, Vishnu the Preserver, who came in the mortal form of Prince Rama to save mankind from evil as represented in the Ruler of the Giants, King Ravan…For centuries, the adventures of Prince Rama and Princess Sita in that Golden Age were preserved by word of mouth. The people learned it in their youth and then taught it to the generation following. And each generation reverently added to the recital its own embroidery. Bards and storytellers arose who specialized in reciting the adventures of Rama. Parts of the very long epic were chanted to the accompaniment of music at every conceivable anniversary of living. In time people came to regard the mere reciting of the story, or parts of it, as having the power to cure disease, absolve people from sin, bring happiness to the sorrowful, and transport the dying into the Heaven of Vishnu." (pp.viii-ix). Ram-līlās, or enactment of the pastimes of Rām, are as much a part of Indian culture, as theatre and opera is to the west.

The Context – The story of the Rāmāyaṇa

Bāl Kāṇḍa (Rām's youth). The story is based in the city of Ayodhyā, situated on the banks of the river Sarayū, in northern India, where a good king, Daśarath, ruled. The ageing king had three wives – Kausalyā, Kaikeyī and Sumitrā, but no children. Through divine benediction, the wives give birth to four sons – Kausalyā gives birth to Rām, Kaikeyī to Bharat and Sumitrā has two sons – Lakṣmaṇ and Śatrughna. The four brothers are very close to each other and grow up as ideal princes – reverence for elders, a strong sense of duty and bravery in war define them.

As the princes are growing up, the sage Viśvāmitra requests for the services of the princes to help guard his sacrificial fire which is being polluted by visiting demons. Rām, accompanied by his brother Lakṣmaṇ, who is his constant companion, destroys the demons. Accompanied by Viśvāmitra, Rām and Lakṣmaṇ visit Mithila, where King Janak is organizing a swayamvar for his beautiful daughter – Sītā. The swayamvar was a function where various kings and princes are invited to help find a groom for a princess. This one had a difficult condition though – Sītā was to marry that person who would be able to lift and string an extremely heavy bow. None of the royals present succeed in doing so. At the end, the young prince Rām gets up and not only easily lifts the bow (see Figure 3), but the bow breaks in his process of trying to string it. Thus, Sītā and Rām get

married. The younger three princesses of Mithila get married to the three younger brothers of Rām.

Figure 3 Rām lifting the mighty bow (Ramayana the Epic, 2010)

Ayodhyā Kāṇḍa (the banishment). Deciding that he is getting older, King Daśarath plans to install his eldest son Rām on the throne. The mind of his second queen, Kaikeyī is poisoned by her maid, Mantharā who then demands that her husband fulfill the two wishes that he had granted her years ago. She specifies these wishes to be that 1) her son Bharat be made king instead and 2) that Rām be exiled to the forest for fourteen years. To help his father keep his word, Rām, giving up his princely attire, heads to the forest. His wife Sītā and younger brother Lakṣmaṇ accompany him. Daśarath, meanwhile, dies of grief. Bharat, on learning about his mother's cruel wishes and his brother's departure, heads to the forest to bring back Rām. Rām refuses. Finally, Bharat agrees to be a caretaker for the throne for fourteen years as Rām's representative, keeping Rām's sandals on the throne.

Araṇya Kāṇḍa (the abduction of Sītā in the forest). One day in the forest, the cousin of the powerful demon King Rāvaṇ of Lankā, Śūrpanakhā (the demoness with huge, long nails) spots the two brothers and wants to marry Rām. Rām says he is devoted to his wife and advises Śūrpanakhā to request Lakṣmaṇ instead. Lakṣmaṇ ends up chopping the tip of Śūrpanakhā's nose. Śūrpanakhā goes to her brother Rāvaṇ seeking revenge, and also lets him know that Rām has a beautiful wife, Sītā. Rāvaṇ directs his uncle, Mārīc, to take the

form of a golden deer. Sītā, on spotting the beautiful deer, is enticed by it and requests Rām to get it for her (see Figure 4).

Figure 4 Rām and Sītā in the forest (Ramayana the Epic, 2010)

On being struck with Rām's arrow, the dying demon Mārīc lets out a cry in the voice of Rām. Sītā insits that Lakṣmaṇ should go and help his brother. When Sītā is left alone in her hut, Rāvaṇ, in the garb of a sage, abducts Sītā, puts her in his flying chariot and flies towards Lankā. An old vulture Jaṭāyu tries to help Sītā but its wings are clipped off by Rāvaṇ. Sītā spots a few monkey-like humanoids (called vānar) on a hill and drops her ornaments wrapped in a cloth to them.

Figure 5 Hanumān carrying Rām and Lakṣmaṇ on his shoulders to meet Sugriva in Kishkinda Kāṇḍ (Devotion Only, 2011)

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Kishkinda Kāṇḍ (alliance with the King of the Monkeys). As Rām and Lakṣmaṇ set out searching for Sītā, they meet the mighty vānar, Hanumān, a central character in the epic (Hindus worship Lord Hanumān and sing his heroic deeds as prayer). Hanumān takes Rām and Lakṣmaṇ to Sugriva (see Figure 5), who Rām helps in winning back his lost kingdom from his brother Bālī.

Sundar Kāṇḍ (the beautiful story). The mighty Hanumān does many heroic deeds and eventually locates Sītā beyond the ocean in Lankā.

Yuddh Kāṇḍ (the war at Lankā). With the help of Sugriva's army of the vānars, who build a bridge of floating stones on the ocean, Rām marches to Lankā and defeats the embodiment of evil, the ten-headed Rāvaṇ (see Figure 6). However, before he takes Sītā back as his wife, he asks her to prove her chastity by undergoing a test by fire. Sītā survives unscathed and they all return to Ayodhyā, where the city welcomes them by lighting lamps all throughout – believed to be the first Diwali, the festival of lights.

Figure 6 The ten-headed Rāvaṇ in an enactment of the Rāmāyaṇa (Sarda, 2009)

Uttara Kāṇḍ (the book that was added). This part, supposed to be added later is in Vālmīki's original Rāmāyaṇa, but is absent from Gosvāmī Tulasīdās' Rāmacaritamānasa. It describes the banishment of the pregnant Sītā to the forest, where, in Vālmīki's school itself (the author of the epic becomes a character in it), Sītā gives birth to twins – Lav and Kuś, who later confront their father. On being asked to take back Sītā, Rām, to satisfy the people of Ayodhyā, asks Sītā to take an oath to prove her chastity. Unwilling to take further humiliation, Sītā hands both her sons to their father and enters the core of the earth. Rām rules for many years and finally departs from the world.

The context within another context.

Figure 7 Lord Viṣṇu resting on Śeṣanāga (Devotional World, 2010)

The story of Rām is a context within another context as described in the large pantheon of Hindu scriptures (see Wikipedia-Hindu texts, 2011). The whole universe, as per the scriptures, is run by a trinity of Lord Brahmā (the creator), Lord Viṣṇu (the preserver) and Lord Śiva (the destroyer). At one point in time, the evil demon Rāvaṇ becomes very powerful and all good beings on earth start being threatened. On begin requested for help, Lord Viṣṇu agrees to come to earth in the form of Rām. Lord Śiva wants to serve Rām and comes in the form of Hanumān. Lord Viṣṇu's wife, Goddess Lakṣmī comes to earth as Sītā. The mighty snake, Śeṣanāga, on which Lord Viṣṇu's rests, comes as Lakṣmaṇ (see Figure 7). After Viṣṇu is born as Rām, and when he grows up, gets married, and is about to be pronounced King by his father Daśarath, the gods get worried that Lord Viṣṇu is forgetting his larger purpose of going to earth i.e. to destroy Rāvaṇ. They request Goddess Sarasvatī, the wife of Brahmā and the goddess of learning, to sit on the tongue of Mantharā, the maid and to get Queen Kaikeyī to demand two wishes – one of which is to send Rām to the forest for fourteen years. Countless sages and devotees had been waiting in the forest since ages to see their Lord. Thus, Kaikeyī becomes an instrument to help

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Lord Viṣṇu, in the form of Lord Rām, fulfil the mission of his avatar of destroying Rāvaṇ, the embodiment of evil, from earth and reestablishing righteousness. There are numerous similar parallel tracks connecting various epics and stories in Hindu mythology and scriptures.

Analysis and Findings - Information Seeking Behavior in the Rāmāyaṇa

One major episode of information seeking happens in the chapter Araṇya Kāṇḍa (the abduction of Sītā in the forest), when making sure Sītā is alone, the evil Rāvaṇ abducts her and takes her to faraway Lankā.

Revisiting Figure 2, the workflow of interaction among the different elements of Context, Rām here is the *searcher, seeker or cognitive actor*. Rām's interaction with his *shared context* (surrounding environment – the forest, Sītā, Lakṣmaṇ, clipping of Śūrpanakhā's nose by Lakṣmaṇ, the desire for revenge, mention of Sītā's beauty to Rāvaṇ, the golden deer, Sītā's craving for the deer, Lakṣmaṇ being forced to leave Sītā alone) gives rise to a *problem situation* i.e. the abduction of Sītā. The problem situation brings about a *gap* (as per Brenda Devin's sense making theory – see Case, 2007) or an *information need* in the mind of the seeker Rām. The need for information here or *information required* is the whereabouts of Sītā.

The following verses from Vālmīki Rāmāyaṇa, as listed by Rao and Murthy (2009), show various aspects of Rām's information seeking behavior.

On discovering his wife missing, Rām laments and frantically starts searching for the whereabouts of Sītā. One of the searcher variables (pertaining to the seeker's personal context) is the seeker's prior knowledge of the domain of search. The following verse shows Rām's domain knowledge (or lack thereof) about his required information i.e. the whereabouts of Sītā. It also reflects the *initiation* stage of Kuhlthau (1991)'s model of the information search process – a phase that is marked by *uncertainty* and vague thoughts.

"That bashful Sītā might be stolen by the grudging demons, or slain by the very same grisly demons, or savoured by some gruesome beasts, or else she strayed in this gauntly forest, and even she might have playfully shrouded herself in the grimly forest, or else she must be sheltering herself in this forest which will be gruelling to locate." [3-60-8] *"Or else, she might have again gone to pick the flowers or fruits, or again gone to lotus-lake,*

or gone to the river for water." Thinking thus, Rama started his search for Sītā. [3-60-9]
(Rao and Murthy, 2009).

The affective stages of the actor/seeker in the process of seeking (as per Kuhlthau, 1991) is demonstrated in the verse: *"Rām ran speedily from tree to shrub, from hill to hillock, from river to rivulet, and revolving around them he wailed for Sītā, as he is inundated in a sludgy ocean of woes".* [3-60-11]

Based on the *seeker-source relationship*, Rām approaches those sources with which he has a high degree of comfort and familiarity i.e. they are part of his *shared context*. This degree of sharedness or familiarity can be seen in way in which Rām describes the sources. Here, these include various types of trees (*impersonal or non-relational sources*):

Table 1 Rām's query to different trees (Rao and Murthy, 2009)

Impersonal source	Search query
Kadamba tree	*"Oh, Kadamba tree, seest thou someone a lady who is lover of Kadamba flowers, one with a lovable face and a love of mine, thou tellest me if thou knowest."* [3-60-12]
Bilva tree	*"Oh, Bilva tree, if thou seest someone who is drest in yellowy-ochry silks, whose skin likens to the silkiness of thine leaflets, breasts to thine rotund and silky Bilva fruits, thou tellest me."* [3-60-13]
Arjuna tree	*"Otherwise, thou Arjuna tree, if thou knowest her who is a lover of thine Arjuna flowers and the ladylove of mine, thou telleth whether that slender-waisted daughter of Janaka liveth or otherwise."* [3-60-14]
Kakubha tree	*"As to how this Kakubha tree shineth laden with creepy-creepers, foliole-foliage and flowery-flowers, this tree knowest Maithili whose thighs can be likened to the smoothish trunk of this very Kakubha tree.* [3-60-15].
Tilaka tree	*"As to how this best tree among all trees heareth the chorus of honeybees that singest around it, thereby this Tilaka tree clearly knowest Maithili, a lover of Tilaka trees, as this shouldst have heard her.* [3-60-16].
Ashoka tree	*"Oh, Ashoka tree, an alleviator of agony, that is thine name lingually... but practically and readily name me after thine, by showing my ladylove, as my agony has marred my empathy."* [3-60-17].
Palm tree	*"Oh, Palm tree, if thou seest that lady breasted alike ripened-palm fruits of thine, and if thine mercy is mine, thou telleth of that shapely lady Sītā."* [3-60-18].
Rose-apple tree	*"Oh, Rose-apple tree, if thou seest Sītā and thou knowest my ladylove whose complexion is smoothish like thine Rose-apples, thou telleth me unhesitatingly."* [3-60-19]
Karnikaara tree	*"Aha! Karnikaara tree, now thou art in full bloom and blooming magnificently, if thou seest that lover of Karnikaara-flowers and an immaculate ladylove of mine, thou telleth me."* [3-60-20]

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The examples in Table 1 show that Rām is not averse to seeking information from *multiple sources*. Until this point, all the sources are of the same type (trees; *impersonal sources*). Rām may not have consulted them because of the high quality of these sources. Rather, he chose to ask them for information primarily because of two concerns: 1) *task importance* – the task of finding out about Sītā was very important to him as he loved his wife dearly; 2) *source accessibility*: the trees were not the best sources to help answer Rām's query, but he still consulted them as they were easily accessible. This follows from Zipf's (1949) principle of least effort. If at all Rām attributed the source with quality, it might be because of their location and having been possible witnesses to the abducting of Sītā.

As he did not get an adequate response from these sources (information need not satisfied), Rām switched to another category of sources – this time, animals (see Table 2):

Table 2 Rām's query to different animals (Rao and Murthy, 2009)

Source	Search query
Deer	*"Or else, oh, deer, dost thou know what bechanced to that fawn-eyed Maithili, one with quick-looks like thee deer? Or else, hast she herded herself into the herd of she-deer of yours."* [3-60-23].
Elephant	*"Oh, elephant, thou mightst beheld her whose thighs likens to your trunk at that problematic hour, thus methinks, and that Maithili is familiar to thee, and oh, best elephant, if thou beholdest her, thou tellest me."* [3-60-24].
Tiger	*"Fear not, oh, tiger, hast thou seen Maithili, the moonfaced ladylove of mine, if thou hast seen speak in good faith."* [3-60-25].

It is not clear if animals can be classified as interpersonal (human) or impersonal sources. Perhaps, characters which talk (even if in the form of animals, birds or humanoids) can be classified as interpersonal sources while mute living beings such as trees may be perceived as impersonal sources (only so long as they do not verbally communicate).

This time, Rām switched to an interpersonal source who was part of his shared context and with whom he had a very *high degree of comfort* – his brother Lakṣmaṇ. However, Lakṣmaṇ was not likely to be a high quality source (one which would give out relevant search results), because Lakṣmaṇ was on his way to meet Rām when Sītā was abducted: *"Ha, Lakṣmaṇ, oh, dextrous one, have you seen my ladylove anywhere. Ha, dear, where have you gone. Oh, auspicious lady. Ha, Sītā." Thus, Rām lamented again and again in his search.* [3-60-35] (Rao and Murthy, 2009)

More evidence of affective dimensions (uncertainty and vague thoughts in the initiation stage) based on Kuhlthau (1991) is presented, which show the high importance of the task or problem situation to Rām: *"Rām is on the rove around woods, rivers, hills, mountain-rapids and thicketed forests, speedily and restlessly."* [3-60-37] *"On going round the vast of great forest in that way and on searching for Maithili, his hope became intangible, but again he undertook the search for his ladylove, over-strenuously"*. [3-60-38] *"Thus Rām, the dejected, neared every corner of the forest in his search, and bewailed because that lady with best plaits, Sītā, is not found and missing from him. Even Lakṣmaṇ became whey-faced, frantic-hearted, highly overwrought, by the fear of uncertainty looming large on them."* [3-62-20] (Rao and Murthy, 2009)

Until this point, there wasn't any *search precision* or *recall* and the results or lack thereof didn't satisfy the *information need* of Rām and Lakṣmaṇ, when *"Suddenly Rama cried out: "O Lakshman, here! A garland – such as Sita wore around her neck!" Upon the ground they found a bloodstained vulture, lying dead; and they found arrows nearby like the ones used by the giant host, the broken parts of a golden chariot, silk emblems of a canopy smeared with blood, and one half of a mighty sword."* (Gaer, 1954)

Other versions of the Rāmāyaṇa show conversations with the dying vulture Jaṭāyu (an *interpersonal source*, as it interacts face-to-face with the two brothers) and provides information on Sītā. Hanumān ends up being the most important source of information (in the later stages of Rām's search process – as per Kuhlthau, 1991), who provides information on the direction of Sītā and ultimately flies to Lankā to trace her (in the chapter - Sundar Kāṇḍ or the beautiful story).

Throughout the epic, there's light shed on other contextual variables as well (as studied by Agarwal, Xu and Poo, 2011):

- Variables of the task or environment – task importance (the task was clearly very important to Rām), task urgency, task complexity (the task was urgent but couldn't be accomplished easily since it was very complex - Rāvaṇ lived in a faraway land beyond the vast ocean and was mighty and powerful)

- Variables pertaining to the source – source quality, access difficulty, communication difficulty (we find evidence of consulting sources largely on accessibility, but as the information need is not met, the focus shifts to sources with a high quality which have more reliable information on the whereabouts of

Sītā; communication difficulty with the source was not really seen as an impediment in the episode of Sītā's search in the Rāmāyaṇa – this might be owing to the high importance of the task at hand, and Rām's exceptional ability to identify with and communicate with all types of sources; he saw all these sources as part of his shared context)

▪ Variables pertaining to the seeker-source relationship – inherent lack of comfort (we find evidence of the building of the seeker-source relationship, between Rām and Sugrīva who does not have direct information but helps Rām in the information seeking process).

▪ Control variables, which pertained to the seeker – seeker's learning orientation (Rām was highly motivated), task self efficacy (Rām's self efficacy to do the task on his own was shown as low, whereby he seeks help; Hanumān, in one episode, had to be reminded of his power and task self-efficacy, after which, he successfully manages to fly across the ocean and find Sītā), tenure in the role/organization (Rām had been in the forest for thirteen years when Sītā was abducted), gender (while there as no direct evidence of the role of gender in the search process, gender bias can be seen in the epic and in the treatment meted out to Sītā; it is also reflected in the outcome after she was found – Sītā had to go through a test by fire), age (wasn't shown as a factor), education (Rām was a well-trained and powerful warrier; being God himself, he had power that he could use on will, but chose not to in most occasions – the idea being to set an example on the moral code of conduct for man).

▪ Control variables, which pertained to the environment – favorable learning environment (the environment was not favorable in the beginning, but Rām's search progressed after he met Sugrīva and after he helps him become King), size of team (it was a two-person team in the beginning – Rām and his brother Lakṣmaṇ, but the team size increased once Sugrīva and his army joined in).

Also, understanding the wider context surrounding the search context (the story of Lord Viṣṇu and his taking the avatar, why monkey-like humanoids were instrumental in the search and rescue mission, etc.) is important to understand the tasks and problem situations that bring about an information need and the subsequent information seeking process.

Conclusions and Implications

What I've shown is a small example of how episodes in an epic can be used to enhance and validate contemporary understandings of information seeking behaviour and contextual variables affecting choice of information sources. The study should shed light on recorded information seeking behavior in one of the oldest epics of the world, and help towards understanding the historical evolution of information seeking behavior in context.

Further work would involve analyzing other spiritual texts such as the Bhagavad Gītā. Other episodes of the Rāmāyaṇa could also be studied or the same episode analyzed using a different set of theoretical lenses or a particular model, framework or theory. A theoretical framework based on the findings of the current study could also be constructed.

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