Theoretical and Methodological Considerations for Understanding the Influence of Tacit Knowledge on KO

Carlin Soos

 $\label{eq:UCLA-Department} UCLA\mbox{ - Department of Information Studies, Los Angeles, California\mbox{ - United States}} \\ carlinsoos@gmail.com$

Carlin Soos is a knowledge organization researcher interested in classification theory, domain analysis, and category development. Carlin received his PhD in Information Studies from UCLA in 2023; his dissertation explored how tacit knowledge, heuristic reasoning, and the formation of perceptual categories influences knowledge organization practices and social classification. He now supports academic programming and course management as part of the Office of the Provost at Monclair State University.

Soos, Carlin. 2024. "Theoretical and Methodological Considerations for Understanding the Influence of Tacit Knowledge on KO". *Knowledge Organization* 51, no. 5: 300-309. 32 references. DOI:10.5771/0943-7444-2024-5-300.

Abstract: This paper examines Jewish dietary laws (*kashruth*) as a knowledge domain, focusing on the ways tacit knowledge has impacted the development and continued use of this dietary ontology. Building from this case study, a framework is proposed for categorizing tacit expressions and assessing their impact on knowledge organization practices. This framework establishes three tacit categories based on two communicative variables — self-disclosure and verbal omission — and emphasizes the methodological value of a domain-analytic approach for identifying tacit traces within explicit language.

Received: 20 March 2024; Revised 24 March 2024; Accepted 25 April 2024.

Keywords: Tacit knowledge; domain analysis; dietary guidelines; kashruth.

† This article was selected as one of the best papers at the Seventh ISKO UK biennial Conference, July 24-25, 2023, held at the University of Strathclyde, Glasgow, in partnership with the School of Computing, Engineering & the Built Environment at Edinburgh Napier University.

1.0 Introduction

With the incremental Hellenization of the Southern Levant bringing significant changes to the cultural landscape of ancient Palestine, to be a Jew in the second century BCE was to seemingly exist in both internal and external conflict. As few personal accounts have survived from the Second Temple period (516 BCE - 70 CE), the more affective aspects of this narrative admittedly demand a potentially anachronistic kind of empathy, but David Kraemer nonetheless asks his readers to situate the formation and initial acceptance of today's Jewish dietary laws (*kashruth*) within this tableau, arguing: "This was the period when, after centuries of formation and accretion, the Torah, along with the historical and classical prophets, had achieved their canonical formation. This was the period when these books were accepted as authoritative by the majority of Jews. This was the

period when the laws they describe defined the life of Jewry, individually and as a nation" (Kraemer 2008, 35). Before we can understand Jewish dietary practices in their contemporary form, we must first understand the social domain in which they were first developed and refined. Mirroring Kraemer's core methodological positionality, Hjørland (2002, 436) emphasizes that historical research methods provide valuable tools for domain assessment. "When it comes to understanding documents, organizations, systems, knowledge, and information," he argues, "a historical perspective and historical methods are often able to provide a much deeper and more coherent and ecological perspective compared to non-historical kinds of research of a mechanist nature."

Like all things, knowledge communities change and adapt to external and internal influences, and the ancient Jews were no different. Following centuries of development and debate, the Written Torah reached its canonical form in roughly 200 BCE, give or take a hundred years. Yet even without broader community recognition of the now-central text, the historical record shows that a distinctly Jewish identity had persisted for generations prior, suggesting that a similarly distinct way of eating also precedes the formal documentation of the dietary laws. Therefore, although it was at this time, and within this social climate, that Judean religious leaders "sought to create a bulwark against incursions on Jewish identity" (Kraemer 2009, 29) by forming dietary categories separating Jews from gentiles, they did so using an inherited collection of values, knowledges, and beliefs modified to meet the present moment. Historical knowledge reduced to lists of dates and events fails to document this epistemological lineage operating on a somatic, tacit level.

The primary goal of this paper is to present a domainanalytic approach for identifying and understanding the influence of tacit knowledge on knowledge organization (KO) practices. This proposed framework suggests we can identify "traces" of tacit knowledge in documented language using two communicative characteristics: verbal omission and self-disclosure. Based on these two qualitative metrics, I have identified three general types of tacit manifestations: 1) tacit knowledge directly identified through self-disclosure, 2) tacit knowledge indirectly identified through self-disclosure, and 3) tacit knowledge indirectly expressed through verbal omission. The kashruth case study at the center of the paper seeks to illustrate the characteristics of this third tacit type, an application of the proposed methodology, and the project's implications for future KO research.

1.1 Notes on terminology

In this paper, "verbal communication" is interpreted broadly and describes any form of communication expressed using words, which includes spoken, written, and signed language. Communication facilitated by any other means – namely gesture, facial expression, and body language – will be referred to as "non-verbal communication" (Matthews 2014). Ostensive definition, or what Polanyi refers to as "naming-cum-pointing" (1966, 5) is a common example of gestural non-verbal communication.

The process of articulating something using verbal communication will be referred to as "explication." Here, "explicit knowledge" and "explicable knowledge" both describe types of knowledge that can be sufficiently explicated. Any concept, idea, thing, or action that can be internally or instinctively understood by an individual yet cannot be articulated verbally is a form of "tacit knowledge."

2.0 Methodology

KO researchers who analyze historical domains must excavate organizational tendencies, norms, and values from the remnants of the past. Discourse analysis works fairly well on recorded forms of explicable knowledge, yet their tacit counterparts cannot be captured in equally direct ways and, inevitably, evade detection under these document-centric research protocols. To indirectly identify tacit influences through verbalized language, I build upon influential scholarship on "archival silence" (Caswell and Gilliland 2015) to propose a unique domain-analytic approach (Hjørland and Albrechtsen 1995) that "interpret[s] the use of tools, of probes, and of pointers" (Polanyi 1955, 7) to suggest the application of embodied knowledge.

Beginning in section 6.0., this paper studies Jewish religious texts using tools from discourse and frame analysis. Ultimately, I suggest that discursive gaps in oral and nonoral exchanges can be used as a "pointer" towards applied tacit knowledge. A thorough understanding of a domain context helps us determine what important topics may have been left unaddressed in a particular document, and I cautiously propose that these omissions can act as markers of tacicity. When everything has been said, silence looms loud, and Talmudic commentary is notably extensive.

Considering this meticulous documentation, Jewish dietary law offers a useful case study for testing this methodological approach.

3.0 Documenting domain-specific tacit knowledge

Polanyi succinctly summarized tacit knowledge as our ability to "know more than we can tell," explaining, "because our body is involved in the perception of objects, it participates thereby in our knowing of all other things." This embodiment can provide us with an intuitive understanding of something without supplying the means to verbally communicate what it is that we actually know. His classic examples are bike riding and swimming, two common activities that, once learned, are easily performed using muscle memory. Verbal instructions of either, however, are less straightforward. Polanyi explains that "I both know how to carry out these performances as a whole and also know how to carry out the elementary acts which constitute them, though I cannot tell what these acts are." (Polanyi 1966, 4)

Within KO practices, this gap between what one "knows" and can "tell" is often circumvented by focusing on the material objects that "convert" tacit knowledge into "explicit, objective, or public" expressions (Rowley and Hartley 2016, 7). Burnett and Lloyd discuss a similarly transformative process in their discussion of "hidden knowledge," claiming that the tacit-to-explicit conversion renders the hidden discoverable (2020, 1348). For im-

mersive and experiential work genres, such as dances, music, and performance art, discoverability within a KOS is often contingent upon a cataloger's ability to flatten temporal and spatial attributes into more static terminology, a tradeoff that affords user access at the potential expense of particular – arguably essential – qualities. Littletree et al. explain (2020, 414) that many tangible and intangible expressions of Indigenous knowledge are ontologically centered in a relationality counter to industry-standard KO concepts. These relationships and entanglements are equal in importance to other more observable qualities, but a one-to-one conversion from tacit to explicit will often fail to capture this embodied knowledge.

Still, there are situations where tacit knowledge simply needs to be shared in one way or another. Within many professional domains, colleagues develop practical methods for exchanging complex and tacit information, a phenomenon well studied by knowledge management researchers (Fetterhoff et al. 2011; Venkitachalam and Busch 2012; Nonaka and Tekeuchi 1995; Chen et al. 2019). Cognitive Work Analysis (CWA) mirrors the underlying goals of this KM work and has found valuable usage within KO proper (e.g. Smiraglia 2013; Smiraglia 2015; Albrechtsen and Pejtersen 2003; Marchese and Smiraglia 2013). As a supplement to traditional domain analysis, CWA uses ethnographic methods to "gain entry to the symbolic cultural knowledge of the actors in a domain" (Smiraglia 2015, 91), which can reveal the values, interactions, and norms of a domain that cannot be formally documented or described. While certain practices can only be fully understood by actors within a specific knowledge community, CWA provides means for identifying and acknowledging these essential attributes. This paper seeks to contribute to and expand upon this literature by addressing tacit knowledge and its influence on cultural classification practices.

As an embodied phenomenon, tacit knowledge cannot be communicated using straightforward verbal approaches. Instead, it must be identified through the probes and pointers noted by Polanyi, which I associate with two specific discursive features: verbal omission and self-disclosure. Depending on the case at hand, one or both qualities may be relevant. Based on their amenability to each characteristic, expressions of tacit knowledge can be sorted into one of the three categories summarized in Table 1.

3.1 Verbal omission

As noted previously, tacit knowledge is often suggested through silence. If most relevant, domain-specific factors have already been explicitly incorporated into a KOS, I suggest that we can develop a situated and contextual understanding of a knowledge base to determine what things are missing. Since this is a fundamentally speculative process,

we must consider – and, whenever possible, control for – any alternative motivations for knowledge omission.

3.2 Self-Disclosure

Although tacit knowledge cannot be verbally articulated, one can still be aware of and acknowledge its influence. This kind of analytical reflection is rarely incorporated into the KO system itself, but supportive and adjacent documentation can provide an opportunity for self-disclosure. Generally speaking, this type of direct admission removes most of the guesswork and is a more conclusive "trace" than verbal omissions.

Of course, there is one inevitable concern: people sometimes lie. While tacit knowledge can prevent someone from verbalizing or recognizing what it is they know, we must consider the fact that there are political, cultural, and social circumstances in which feigning a tacit limitation is preferential to coming clean about one's intentional or accidental exclusion of explicable knowledge. Within a KO context, unrelated factors, such as the accidental deletion of data or loss of previously collected information, must also be considered.

4.0 Distinguishing between Types 1 and 2: direct vs. indirect expressions

Largely due to the usage of direct explanation, Type 1 is the easiest form of tacit knowledge to identify – it is also the least common of the three. The expression of Type 1 tacit knowledge necessitates an awareness in the speaker that requires pre-exposure in one of two forms: 1) psychological priming, in which the subject passively acquires an "internal readiness" (Bargh and Chartrand 2000, 3) to recognize tacit knowledge; or 2) pre-training where the subject is actively taught to identify tacit knowledge. An excellent example of this is the U.S. Supreme Court case *Jacobellis v. Ohio* (1964), in which Justice Potter Stewart famously rejected calls to define "obscenity," instead writing,

I shall not today attempt further to define the kinds of material I understand to be embraced within that shorthand description; and perhaps I could never succeed in intelligibly doing so. But I know it when I see it, and the motion picture involved in this case is not that (Legal Information Institute 2013).

This phrase – "I know it when I see it" – cuts to the core of Type 1: the speaker is clearly and directly acknowledging some sort of communicative limitation that is preventing him from clearly verbalizing what he knows. As Stewart's employment is fundamentally linked to his ability to closely read a legal text, analyze its semantic particulars, and identify its contextual limitations, this is somewhat unsurprising.

	Type 1: tacit knowledge	Type 2: tacit knowledge	Type 3: tacit knowledge
	directly identified through	indirectly identified through	indirectly expressed through
	self-disclosure	self-disclosure	verbal omission
Description	The author explicitly names or describes the use of tacit knowledge. There is an awareness of both its presence and semantic interference.	The author suggests there is a shared "knowing" but does not acknowledge its epistemic implications, sociological influence, or communicative limitations.	The author is unaware that tacit knowledge is being used.
Primary Expression	Expressed through direct self-	Expressed through indirect self-	Expressed through verbal omission
Characteristic	disclosure	disclosure	
Methods for Analysis	Studied through document and discourse analysis	Studied through document, discourse, and domain analysis	Studied through document, discourse, and domain analysis

Table 1. Categorization of tacit expressions.

Unfortunately, in most circumstances, people are not provided the tools and opportunities needed for direct self-disclosure, and, absent either, they are much less likely to understand that their failure to communicate is coming from an embodied way of knowing. This is demonstrated in Nowe Ateny, the first Polish-language encyclopedia, where author Benedykt Joachim Chmielowski penned a very abridged entry for "horse" consisting of one sentence: "jaki jest, każdy widzi" (Chmielowski). This is usually translated to "everyone knows what a horse is." Although "I know it when I see it" and "everyone knows what a horse is" communicate similar ideas, there are significant differences in their tacit components. In the first scenario, Stewart removed all the guesswork by saying the quiet part out loud: for some reason, I can't tell you what I know. Chmielowski is expressing something fundamentally different: I don't need to tell you what I know. In the first case, the speaker is aware that he is acting upon tacit knowledge to define a category. This awareness is lacking in the second, and Chmielowski does not explain why, exactly, he believes we are all on the same page. The social tacit knowledge being acted upon here is indirectly referenced but not explicitly stated.

5.0 Case study of Type 3: tacit knowledge indirectly expressed through verbal omission

As Types 1 and 2 are reliant on self-disclosure, these forms of tacit knowledge can be identified in verbalized language. In the first case, Stewart provides a relatively explicit admission; while he does not use the actual phrase "tacit knowledge," he describes the concept fairly well. In the second, Chmielowski is less direct, but his phrasing strongly suggests a tacit knowing. Differences aside, both authors' phrasing is

somewhat odd and prompts further exploration. With Type 3, that anchor is removed, and we are presented with a much more difficult challenge: we must discover what is missing in what has been said.

As I suggested in the introduction to this paper, Jewish dietary laws are uniquely suited to this task for two primary reasons. First and foremost, kashruth is a cultural knowledge system that has been meticulously documented and studied. While the analysis of tacit silence is an innately speculative activity, domains and systems associated with significant primary and secondary documentation require us to make smaller conceptual jumps when connecting the dots. As kashruth essentially comes prepackaged with a plethora of commentary and debate via the Talmud, we have a large body of well-studied reference materials to work with. Second, the interpretive activity central to this exercise is mirrored in standard rabbinic practice, including the chavrusa style of informed discussion. According to Steven Fraade (2007), "One of the most celebrated aspects of rabbinic literature is its adducing of multiple interpretations of scriptural verses and its valorizing of multiple legal opinions as expressed in debate among the rabbinic sages." Rather than a disrespectful insertion into a world shielded from personal opinion, this exercise can be viewed as an addition to this domain and its standard practices.

5.1 The problem with pigs

When I ask most people to guess what makes something kosher, I tend to receive one of three answers: 1) the food does not contain pork, 2) it does not mix meat and dairy, or 3) it has been blessed by a rabbi. Interpreted generously, all three responses are partially correct. Yes, Jewish law prohibits the

	Source		■ Scale		
Prohibited Animal Products	Biblical	Rabbinic	Kind	Part	Combo
Blood Dam פּם	•			•	
Carrion Neveilah נֵבילה	•			•	
Mixing meat and milk of domesticated animals <i>Basasr bdhalav</i> בָּתִלִב	•				•
Mixing meat and milk of non-domesticated animals Extension of basasr b'chalav		•			•
Dangerous foods Sakanah סַכָּנָה		•	•		•
Fats Cheilev תֶּלֹב .	•			•	
A limb from a living creature Eiver min hadhai אי,בר מן החוין.	•			•	
Mortally injured טֵרִיפּה,	•				
Non-Jewish cheese Gevinas Akum גבינַח _עוב"ם,		•			
Non-Jewish milk Chalav Akum חֻלב _עוּבּ"ם,		•			
Non-kosher animals Bebeimah temeiah ט_מאָה,בּ.הָמה	•				
Non-kosher fish Dag tameh דג טַמַמא	•				
Non-kosher fowl Ouf tameh עוף טגא	•		•		
The sciatic nerve Gid hanasheh הְשָנֵד - ַהגּן	•			•	
Swarming insects and rodents Sheretz پيّ	•				
Tissue and fat surrounding the sciatic nerve Extension of <i>gid hanasheh</i>		•		•	

Table 2. Kashruth guidelines related to the consumption of animals and animal products.

consumption of pork, forbids the mixing of meat and milk, and requires the input of specialized religious experts at certain points in the food production cycle, but these comprehensive dietary rules extend far beyond a single person or species to moderate the raising, processing, and consumption of all crops, non-human animals, and the derivatives of both. Of these rules, sixteen apply specifically to meat and animal products, as demonstrated in Table 2.

Translations and transliterations are taken from Forst (1994). "Source" refers to the origin of the dietary law and is divided, also following Forst, into two categories: rabbinic and biblical. "Scale" identifies if the rule prohibits the consumption of an entire kind/type, a specific part of a kind, or the mixing of different kinds and/or parts.

Based on biblical proclamations, bacon is indeed off-limits, but pigs are just one of four "unclean" animals (*beheimah temeiah*) explicitly named in Deuteronomy (14:6-8):

- 6. And every animal that has a split hoof and has a hoof cloven into two hoof sections, [and] chews the cud among the animals that you may eat.
- 7. But you shall not eat of those that chew the cud, or of those that have the split hooves: the cloven one, the camel, the hyrax, and the hare, for they chew the cud, but do not have split hooves; they are unclean for you.
- the pig, because it has a split hoof, but does not chew the cud; it is unclean for you.
 You shall neither eat of their flesh nor touch their carcass (Sefari n.d.(a)).

and in Leviticus (11:7):

11. And the pig, because it has a cloven hoof that is completely split, but will not regurgitate its cud; it is unclean for you (Sefaria n.d.(a)).

Following these texts, an animal can be to be classified as "clean" (*beheimah tehorah*) if they meet two criteria, or *simanim* (signs): they ruminate and have fully split hooves. Camels, hyraxes, and hares meet the first but not the second; pigs meet the second but not the first.

Notably, while the cloven-hooved species are presented as a trio, the pig is alone.

However, within the *beheimah tehorah* category, there is no additional hierarchy, and all four species are equally unclean. And yet whenever I ask, "What foods aren't kosher?" no one has ever replied with "hyrax meat." It's always pigs, and, for the most part, this seems to have always been the case. But why this incessant preoccupation with pork?

Kraemer (2008, 13) proposes that the "categories established by the Torah's eating laws [...] reflect the values, and even the categories, of the Israelite society in which these laws were promulgated." Thus the "key to interpreting the system," and the pig's place within it, is to "discover the manner in which the animal taxonomy described in the Torah reflects the human society whose values it represents." Of all the kinds listed, why have pigs maintained such a central position in this dietary ontology? What damned place did the animal occupy in the minds of those dictating the biblical canon? Why was it not the hyrax?

5.2 Unclean animals (and the people who eat them)

Around the first century BCE, pork consumption rose among the general population of Palestine, a trend linked to a combination of pragmatic and cultural pressures. With the Hellenization of the region came the adoption of Greek, and later Roman, dietary customs, including their preference for pork (Kraemer 2008, 33). "Thus, the abundance of evidence, both direct and indirect, supports the same conclusion," Kraemer explains:

When the common Palestinian Jew viewed the common gentile eating meat at her or his table – in the first century BCE or of the first century CE – that meat was far more likely to be pork than anything else. In other words, of all the species marked off-limits by the Torah's legislation, the only one concerning which this would be a difference on a regular basis was the pig. The rest were primarily of academic interest, the pig was a presence and potentially a temptation (32-33).

When Jewishness seemed vulnerable to outside influence, meal patterns provided an opportunity to pronounce and reaffirm one's identity three or so times each day. Sure, the hyrax was deemed equally unfit for Jewish consumption, but there was little use in emphasizing a kind of food that was seldom on the table. Pigs, on the other hand, were a relatively abundant and culturally significant protein source easily imbued with symbolic value.

At the time these kashruth categories were codified, a rejection of pork was much more than a dietary choice; it was a political statement. In Palestine during the first century BCE, pigs were not "unclean" simply due to their nature or poor hygienic tendencies. Rather, the animals unwillingly adopted a symbolic association with the Hellenization of the region. You were not dirty for eating pigs - pigs were dirty, at least in part, because of who was eating them. Eilberg-Schwartz (1990) has written in support of this stance, claiming that these "dietary restrictions carve up the animal world along the same lines as Israelite thought," with the good, "clean" animals representing the Kingdom of Israel and the "unclean" symbolizing the other (also see Kraemer, 20). In an early iteration of "you are what you eat," religious authority used these classificatory divisions to guide the general population towards a life of moral purity. Abraham warned Jacob, "[Separate] from the nations, and do not eat with them for their works are unclean and all their ways polluted" (Jubilees 22:16). The pig was but an idol of this polluted society.

Writing approximately a millennium after the formation of the Written Torah, the Sephardic philosopher and theologian Maimonides commented on the *kashruth* of pork and proposed an alternative origin to the law. In *The Guide for the Perplexed* (ca. 1190 CE), he offers a public health justification for the prejudice against pigs, asserting, "The principal reason why the Law forbids swine's flesh is to be found in the circumstance that its habits and its food are

very dirty and loathsome" (Friedlander 1903). Contextually, this determination makes sense. As other rabbinic injunctions ban so-called "dangerous foods" (*sakanah*), safety was clearly a consideration when crafting the food laws. However, when Maimonides previously analyzed and discussed the nature of *sakanah* in *Mishneh Torah* (ca. 1170-1180 CE), this danger was of a different variety – namely snakes and their venom. Stabbings were also apparently of concern, and the reader is warned that "one should not stick a knife into an etrog¹ or into a radish, lest a person fall on its point and die" (Friedland 1903). Pigs, however, are not mentioned.

While Maimonides's claim to the "loathsome" nature of the pig appears to mirror common rhetoric unfairly casting the animal as an innately dirty creature, this alone does not justify their exemplarily poor biblical and societal status. For one thing, if there was something especially egregious about pigs themselves that rightfully earned them such a terrible reputation, this reasoning would have likely been dictated directly in the Talmudic texts or its commentaries, both of which eagerly cover the most unlikely and obscure of scenarios (e.g. death by etrog stabbing). The ancient sages and later commentators, including Maimonides, neglected to meticulously dissect very few of the Torah's concepts and terms, and yet the meaning behind moralized phrases such as "clean" and "unclean" continues to be debated by modern Jewish Studies scholars. I would argue that this failure to explicitly define such foundational categories suggests a tacit understanding that was either impossible to articulate or otherwise rooted in an implicit social value. As Culler explains (1981, 39), "acts of imposition are themselves made possible by the situations in which they occur, and meaning cannot be imposed unless they are understood, unless the conventions which made possible understanding are already in place." Without a preexisting understanding of pork's symbolic and material value, the prohibition would likely not have had such a lasting impact on Jewish dietary identity.

Maimonides's public health argument is not entirely unreasonable, but some of his other statements suggest a deeper, more tacit factor is at play here. Later in his Guide, he writes that "[if Jews] were allowed to eat swine's flesh, the streets and houses would be more dirty than any cesspool, as may be seen at present in the country of the Franks" (Friedlander 1903). Although we cannot conclusively ascribe intention, this claim appears closer to a true justification: if we were to eat pigs, we would inevitably become like the Franks. Either the Franks are loathsome because they consume pork, or the Franks are loathsome, so, therefore, they eat pigs. Both logics are probable, but it ultimately does not matter which is the case. In both scenarios, the tacit essence of the animal's uncleanliness can only be explained through the habits of the Franks. Viewed this way, pigs become a proxy for the people that consume them.

Support for this interpretation is provided by Klawans (2000), who presents a schema of Jewish purity that further divides Jewish law (halacha) into subcategories based on each law's moralistic or ritualistic purpose. He notes that while kashruth directions are sourced from both Leviticus and Deuteronomy, most laws related to ritual are covered in Leviticus 12-15, while most based on moral arguments are covered in Leviticus 11. Although there is an obvious overlap between the two categories, the division makes sense when one remembers that a significant portion of ancient Jewish worship manifested through sacrificial Temple offerings. Therefore, while moral purity undeniably impacted ritual practices and vice versa, Klawans notes (2000, 31) that consumption of the "impure foods" listed in Leviticus - including the pork prohibition at 11:7 - is broadly prohibited and not simply "defiling" for ritualistic purposes. Thus the "outright prohibitions of eating certain food function more like a moral defilement than a ritual one" (Klawans 2000, 31).

6.0 Tacit traces and transference

This paper does not aim to conclusively determine the "true" reasons for the kashruth pork prohibition. Although I have raised some suggestions based on the more informed opinions of different Jewish and religious scholars, my primary conclusion is much less determinative: at the end of the day, this seems like a lot of upset over one animal mentioned a handful of times in the whole Torah. When these dietary laws were being crafted, the ancient rabbis likely had more pressing concerns to contend with, and Douglas notes (1993, 22) that it "is not in the grand style of Leviticus to take time off from cosmic themes to teach that these pathetic creatures are to be shunned because their bodies are disgusting, vile, bad." This persistent fixation on pigs gestures towards an inherent and parasitic vice to be avoided at all costs, but, millennia later, we must accept that at least part of the claim's original logic has been lost to time.

Although the reason for this seemingly outsized disdain for swine is not entirely clear, we can glean insights from how it is discussed in the supportive literature often studied alongside the canonical religious text. For example, a Midrash (*Midrash Tanchuma*, Noach 13) on the dangers of excessive alcohol consumption portrays the pig in a similarly unfavorable light:

What did Satan do? First, he obtained a lamb and slaughtered it beneath the vineyard. Then, he took a lion and slaughtered it there, and after that he obtained a pig and an ape and slaughtered them in the same place. Their blood seeped into the earth, watering the vineyard. He did this to demonstrate to Noah that before drinking wine man is as innocent as a sheep: Like a

sheep that before her shearers is dumb (Isa. 53:7). But after he drinks a moderate amount of wine he believes himself to be as strong as a lion, boasting that no one in all the world is his equal. When he drinks more than he should, he behaves like a pig, wallowing about in urine and performing other base acts. (Sefaria n.d.(b))

Notably, the pig once again occupies the lowest position and is used to illustrate the worst of human qualities – and, again, the animal's fate lies not in its own actions but in those who supposedly emulate its traits. Although the pig becomes an accomplice of sorts in the drunkard's actions, the animal is mostly a casualty of the other's disgrace. Essentially, all that the pig tacitly represents can only be understood once it is transferred into and articulated through a human avatar.

Like many other writers before me, I can only speculate on the meaning of these biblical and rabbinic clauses, but our ability to conduct these sorts of analytical exercises comes from an intuitive sense there is some sort of missing justification. Regardless, the prohibition on pork remains a foundational touchstone for discussions of kashruth both within and outside the Jewish community. This dietary framework continues to influence the daily dietary habits of many Jews, and our understanding of these religious laws and the ontology they construct provides insights into how tacit cultural knowledge is shared between generations. Two thousand years ago, the symbolic associations attached to pork consumption may have been blatantly obvious. For this dietary restriction to have received community acceptance at a time when pigs were one of the most commonly consumed animals, it must have been convincing. The lack of explanation within the primary or secondary sources is thus notable and, within itself, informative.

7.0 Conclusion

The theoretical and methodological framework proposed here seeks to illustrate one way KO scholars might identify tacit knowledge and its influence. As an embodied phenomenon, tacit knowledge cannot manifest through straightforward language, requiring descriptions that are indirect and often more ambiguous. Here, I have ultimately argued that we can learn to identify instances where tacit knowledge may have been utilized by developing a thorough understanding of a particular knowledge domain. With this contextualizing information, verbal gaps and textual omissions can be analyzed as traces of tacit knowledge in action.

I have proposed three categories of tacit types based on varying degrees of self-disclosure and verbal omission, an approach that seeks to identify tacit knowledge through either the acknowledgment of the original speaker or the gaps in their documented narratives. My selection of the first metric (self-disclosure) is based on the perspective that, while tacit information cannot be articulated, an individual may nonetheless be aware that certain cognitive and linguistic blocks are present. Self-disclosure offers an opportunity to describe one's experience in more roundabout terms; researchers may collect this information through qualitative interviews or, in the absence of the original subject, using forms of document and discourse analysis. The second metric (verbal omission) relies heavily on tools from domain analysis to develop a foundational understanding of the ideas, terms, and topics central to a knowledge community. From this thorough understanding of discursive norms, researchers may suggest what expected information appears to be absent.

Standard KO practices are often quite effective at describing and organizing documents and other records to meet the needs of a particular community at a particular time. Through an evaluation of material content, patterns can be identified; based on these patterns, items can be positioned in a way that supports access and retrieval. Debate surely persists about the ideal way of approaching particular subjects or scenarios, but there is typically consensus that a majority of organizational choices should be rooted in the actual content being organized. The goal of this discussion is not to deny the importance of this general axiom. However, while affirming the value of this basic argument, I also believe it is equally important to acknowledge how the nature of tacit and implicit knowledge challenges to this approach.

While many important cultural phenomena find direct articulation through language, this is not universally true. Many of the social values, lessons, and beliefs underlying our ontological perspectives come from relationships and associations acquired incrementally through experience. Due to spacetime limitations, we are unable to return to a gone place or time to inquire about its classificatory habits. This poses a methodological challenge for KO researchers attempting to understand historical organizational practices and their tacit components. Without the ability to ask questions directly, our only option is to find clues in the historical record and fill in the gaps to a reasonable extent. Experts with extensive knowledge of a particular domain are uniquely situated to conduct this type of work, and I wish to emphasize the importance of holding a robust understanding of a particular domain before proceeding with this type of research. Close collaboration with domain experts is paramount to ensuring the academic value and ethical application of this methodological approach.

Of course, we will never truly understand what it was like to be a particular person in a particular place at a particular time, and with the death of a person goes the only source capable of testifying to their tacit knowledge. Empathy can only go so far, and "a trace always [refers] to another whose eyes can never be met" (Derrida 1995, 84). But, in the sharpening of our own eyes, we can locate evidence of this embodied experience in the marks left behind. A body dies, but it always leaves a trace.

Endnote

1. A citrus fruit resembling a large, misshapen lemon.

References

- Albrechtsen, Hanne, and Annelise Mark Pejtersen. 2003. "Cognitive Work Analysis and Work Centered Design of Classification Schemes." *Knowledge Organization* 30, no.3/4: 213-227.
- Bargh John, and Tania Chartrand. 2000. "The Mind in the Middle: A Practical Guide to Priming and Automaticity Research". In: *Handbook of Research Methods in Social* and Personality Psychology, edited by Harry T. Reis and Charles M. Judd, 253–285. Cambridge: Cambridge University Press.
- Berman, Samual A. 1996. Midrash Tanhuma-Yelammedenu:

 An English Translation of Genesis and Exodus from the Printed Version of Tanhuma-Yelammedenu with an Introduction, Notes, and Indexes. Hoboken, NJ: KTAV Publishing House. URL: https://www.sefaria.org/Midrash_Tanchuma?tab=contents.
- Burnett, Simon, and Annemaree Lloyd. 2020. "Hidden and Forbidden: Conceptualizing Dark Knowledge." *Journal of Documentation* 76 no. 6: 1341-1358. https://doi.org/10.1108/JD-12-2019-0234.
- Caswell, Michelle, and Anne Gilliland. 2015. "False Promise and New Hope: Dead Perpetrators, Imagined Documents And Emergent Archival Evidence." *The International Journal of Human Rights* 19 no.5: 615-627. https://doi.org/10.1080/13642987.2015.1032263
- Chen, Hui, Jose Miguel Baptista Nunes, Gillian Ragsdell, and Xiaomi An. 2019. "Somatic and Cultural Knowledge: Drivers of a Habitus-Driven Model of Tacit Knowledge Acquisition." *Journal of Documentation* 75 no.5: 927-953. https://doi.org/10.1108/jd-03-2018-0044.
- Chmielowski, Benedikt. Nowe Ateny, n.d. https://literat.ug.edu.pl/ateny/.
- Culler, Jonathan. 1981. *The Pursuit of Signs*. Ithica, NY: Cornell University Press.
- Derrida, Jacques. 1995. Archive Fever: A Freudian Impression (trans. Eric Prenowitz). Chicago, IL: University of Chicago Press.
- Douglas, Mary. 1993. "The Forbidden Animals in Leviticus." *Journal for the Study of the Old Testament* 18 no.53: 3-23. https://doi:10.1177/030908929301805901.
- Eilberg-Schwartz, Howard. 1990. The Savage in Judaism: An Anthropology of Ancient Israelite Religion and An-

- *cient Judaism.* Bloomington and Indianapolis: Indiana University Press.
- Fraade, Steven D. 2007. "Rabbinic Polysemy and Pluralism Revisited: Between Praxis and Thematization." *AJS Review* 31 no.1: 1-40.
- Fetterhoff, Terry, Pam Nila, and Robert C. McNamee. 2011. "Accessing Internal Knowledge: Organizational Practices That Facilitate the Transfer of Tacit Knowledge." *Research Technology Management* 54 no.6: 50-54.
- Forst, Binyomin. 1994. *The Laws of Kashrus*. Brooklyn, NY: Mesorah Publishing.
- Friedlander, Martin. 1903. The Guide for the Perplexed by Moses Maimonides translated from the original Arabic text. https://www.sefaria.org/Guide_for_the_Perplexed?tab=contents.
- Hjørland Birger and Hanna Albrechtsen. 1995. "Toward a New Horizon in Information Science: Domain-Analysis." *Journal of the American Society for Information Science* 46 no.6: 400-425.
- Hjørland Birger. 2002. "Domain Analysis in Information Science: Eleven Approaches Traditional as Well as Innovative." *Journal of Documentation* 58 no 4: 422-462. https://doi:10.1108/00220410210431136.
- Klawans, Jonathan. 2000. *Impurity and Sin in Ancient Judaism*. New York, NY: Oxford University Press.
- Kraemer, David. 2008. *Jewish Eating and Identity Through the Ages*. New York, NY: Routledge.
- Legal Information Institute (LII), Nico JACOBELLIS, Appellant, v. STATE OF OHIO, 2013. URL: https://www.law.cornell.edu/supremecourt/text/378/184.
- Littletree, Sandra, Miranda Belarde-Lewis, and Marisa Duarte. 2020. "Centering Relationality: A Conceptual Model to Advance Indigenous Knowledge Organization Practices." *Knowledge Organization* 47 no.5: 410-426. doi:10.5771/0943-7444-2020-5-410.
- Matthews, Peter. 2014. "Non-verbal Communication." In: *The Concise Oxford Dictionary of Linguistics*, 3rd ed., edited by Peter Matthews, New York, NY: Oxford University Press.
- Marchese, Christine, and Richard. P. Smiraglia. 2013. "Cognitive Work Analysis for Domain Analysis in an HR Firm: Emergent Vocabulary to Domain Ontology". *Advances In Classification Research Online* 23 no.1: 28-29. https://doi:10.7152/acro.v23i1.14232.
- Nonaka Ikujiro, and Hirotaka Takeuchi. 1995. *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford: Oxford University Press.
- Polanyi, Michael. 1966. *The Tacit Dimension*. Chicago, IL: University of Chicago Press
- Rowley, Jennifer, and Richard Hartley. 2008. Organizing Knowledge: An Introduction to Managing Access to Information, 4th ed. Routledge, New York, NY, 2008.

- Sefaria. N.d.(a). Tanakh. https://www.sefaria.org/texts/ Tanakh.
- Sefaria. N.d.(b). *Midrash Tanchuma*: Noach, Siman 13. https://www.sefaria.org/Midrash_Tanchuma%2C_Noach.
- Smiraglia, Richard P. 2013." Is FRBR a Domain? Domain Analysis Applied to the Literature of The FRBR Family of Conceptual Models." In: *Proceedings from the North American Symposium on Knowledge Organization*, 4 no.1 Milwaukee, WI: ISKO C-US.
- Smiraglia, Richard P. 2015. Domain Analysis for Knowledge Organization, Waltham, MA: Chandos Publishing.
 Venkitachalam, Krishna, and Peter Busch. 2012. "Tacit Knowledge: Review and Possible Research Directions."

Journal of Knowledge Management 16 no.2: 357-372.