

SPATIAL TERMS IN NORWEGIAN: PÅ AND I

A Thesis submitted to the faculty of
San Francisco State University
In partial fulfillment of
the requirements for
the Degree

Master of Arts

In

English: Linguistics

by

Jenna Suria Ferrario

San Francisco, California

May 2022

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Certification of Approval

I certify that I have read Spatial Terms in Norwegian: på and i by Jenna Suria Ferrario, and that in my opinion this work meets the criteria for approving a thesis submitted in partial fulfillment of the requirement for the degree Master of Arts in English: Linguistics at San Francisco State University.

Jenny Lederer, Ph.D.
Associate Professor,
Thesis Committee Chair

Anastasia Smirnova, Ph.D.
Associate Professor

Spatial Terms in Norwegian: på and i

Jenna Suria Ferrario
San Francisco, California
2022

The schemas of CONTAINMENT and CONTACT in Norwegian are traditionally represented through the prepositions *i* and *på*. This does not account for instances where the two are used in place of each other in Old Norse and Modern Norwegian discourse. Previous studies have only looked at these schemas in Modern Norwegian cross-linguistically (Syzmańska 2010; Egan & Rawoens 2017) and not diachronically. This study reexamines the CONTAINMENT schema as ENTRY and ENCLOSURE in conjunction with the CONTACT schema to investigate any crossover between the two schemas and to shed light on how this affects the prepositional interchangeability in ambiguous contexts. Part One follows *i* and *på* in four different eras (Old Norse, Old Norwegian, Middle Norwegian, and Modern Norwegian) and tracks the implementation of each schema through the landmark's characteristics. Part Two surveys Norwegian speakers on whether *i* and *på* can be switched in contexts without a manner of motion verb. Part One found that ENTRY, ENCLOSURE and CONTACT crossed with temporal landmarks and landmarks perceived as bounded spaces. Part Two confirmed these findings.

Preface and/or Acknowledgements

To Professors Jenny Lederer and Anastasia Smirnova, I could not have done it without your gentle guidance. Thank you for letting me push through until the end.

To the ECOLE lab and my cohort, thank you for fruitful discussions and your raw feedback.

To my friends and family, you have supported me for so long that I am forever grateful to you for being my rock during turbulent times.

To the Røise, Nawaz, and Justad families, thank you for showing such animated interest in this project.

And finally, to Joachim Justad Røise, my Norwegian consultant, who kept me going through it all.

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Introduction

Consider the following sentences: Pepper is sitting on the bus. Pepper is sitting in the bus. Is there much difference between the two? Situationally there is not. Both portray Pepper riding the bus. The difference being that first sentence focuses on Pepper contained within the body of the bus and the second focuses on the relationship between Pepper and the bus seat; they are in contact. This understanding is made possible by the recognition of how objects interact with space. These interactions are expressed linguistically through spatial terms, like the prepositions *in* and *on* from the examples above. Depending on how space is divided these terms may encompass different scenarios (Bowerman 1996; Choi 2006). Johnson and Lakoff posit that the mechanism behind understanding these different scenarios is a series of patterns derived from bodily interaction with the world. They embody several different types of patterns, the largest of them being spatial (Johnson 1987; Lakoff 1987). The examples above evoke both the CONTAINMENT and CONTACT schemas, patterns that are both perceivable when riding the bus.

As these patterns are based in bodily experience, they can result in different realizations depending on the experience. This has resulted in a variety of different lists when cognitive linguists compile image schemas. CONTACT though initially listed as separate schemas under both Johnson and Lakoff has also been associated with the SUPPORT schema (Navarro i Ferrando 1999) and CONTAINMENT was reorganized into ENTRY and ENCLOSURE (Dewell 2005).

This study will examine the image schema associated with Norwegian prepositions *i* and *på* from Old Norse to Modern Norwegian. Modern Norwegian teaches that *i* is rooted in CONTAINMENT schema and *på* in CONTACT schema. This, however, does not account for instances where they have been used in place of each other in Old Norse (Barnes 2008) and in Modern Norwegian discourse. Reconfiguring the CONTAINMENT schema into ENTRY and ENCLOSURE in a diachronic investigation into spatial scenarios involving *i* and *på* might shed some light on why they have been used interchangeably. This study also seeks to answer whether *i* and *på*, given their history of similar translations, could be switched in ambiguous contexts with changing the meaning of the sentence.

Background

Image Schema Theory

In their books *The Body and the Mind* and *Women, Fire, and Dangerous Things*, Johnson and Lakoff identify image schemas as prolific patterns based on a series of repeated events derived from our bodily interactions with the world. They are gestalt, but not as abstract as they cannot be represented schematically (1987). Image schemas are not taught but gleaned from interaction with one's environment. Evidence of such a notion was put forth by several child language acquisition studies. Children interact with spatial scenarios independent from language prompts. They are then able to apply new vocabulary to previously experienced scenarios. These scenarios, such as fitting a block into a space, were referred to as prototypes. These prototypes represent the basic interactive patterns in the world (Mandler 2005).

Image schema also provide foundation for understanding metaphor. The patterns experienced in the world can be mapped onto other domains so the mind can better comprehend them. These observed patterns act as a lens through which people express abstract ideas. They can do so because these patterns derive from fundamental relationships in the world (Lakoff 1987; Johnson 1987).

Johnson and Lakoff identify a handful of prolific schemas: CONTAINMENT, SOURCE/PATH/GOAL, LINK, PARTWHOLE, CENTER-PERIPHERY, and BALANCE. However, they each have their own idea of other schemas. Differences include Lakoff's UP-DOWN and FRONT-BACK schema to Johnson's CONTACT, NEAR-FAR, FULL EMPTY etc. And since then, other schemas have also been identified. Though with varying degrees of agreement among cognitive linguists. This evolving list speaks to the perspective-based nature of image schemas. Different experiences bequeath different viewpoints which in turn will manifest as various image schema.

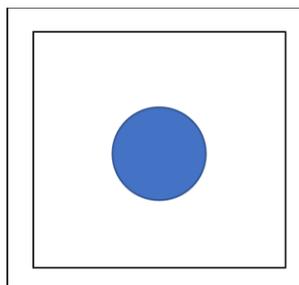
There is a key difference in use of image schema following their introduction by Johnson and Lakoff, however. Johnson stresses their dynamic nature. Johnson uses the example of a child entering the kitchen, grabbing a cookie, walking to her mother, and receiving a hug. Each event illustrates a mobile experience that can be schematized. The inherent motion of image schemas can also be conceptualized through the trajector (TR)/landmark (LM) theory in which one views an event as a change between two objects. The object instigating the change is the TR while the object harboring the change is the LM (Langacker 1987). These events often encode a sense of space.

However, Johnson also stresses that even schematized portrayals of these dynamic patterns are somewhat misleading. As they exist on a 2-D plane they are only able to portray a single frame of the action. He and Lakoff assert that image schema may not exist on their own, but as a series of transformations. These transformations are different versions of the prototype schematic pattern because of the scenario at hand.

The CONTAINMENT schema

CONTAINMENT is one of the most studied relationships and examples of image schema across languages (Herskovits 1986; Johnson 1987; Lakoff 1987; Vandeloise 1991; Cuyckens 1993; Tyler & Evans 2003; Dewell 2005; Choi 2006; Peña 2008). It combines the ideas of spatial boundedness and an interior-exterior relationship via three-dimensions (Johnson 1987; Lakoff 1987; Tyler & Evans 2003). Spatial boundedness requires an understanding of demarcated space resulting in an interior and an exterior. The prototypical schematic of this relationship is represented in Figure 1.

Figure 1: CONTAINMENT schema in 2-D



Yet while this is clear on a two-dimensional plane, humanity interacts with and perceives the world in three dimensions. CONTAINMENT does not just happen within bounded spaces, but with objects of all shapes and depths. Dewell (2005) notes that humans experience forms of CONTAINMENT in many different scenarios. He notes that hands holding cookies create a

confined space and bodies in clothing are restricted by the boundaries of the fabric. However, these kinds of interactions, including partial containment, are not accurately represented in the two-dimensional bounded space aspect of Figure 1. Rather a three-dimensional understanding of CONTAINMENT would encompass these different transformations (Herskovits 1986; Vandeloise 1994; Dewell 2005).

Some interactions have felt so far removed from each other that they lead to a reorganizing of the CONTAINMENT schema. Dewell (2005) notes that object characteristics for English are anchored in clearly defined bound spaces on one end (ex. box, other objects) and more abstractly defined objects like liquids on the other. The associations related to these objects revealed more specific patterns of CONTAINMENT: ENTRY and ENCLOSURE. Objects with both characteristics place in the middle as they have defined boundaries with cavities and are more flexible in nature (ex. socks, canvas bags).

The CONTACT Schema

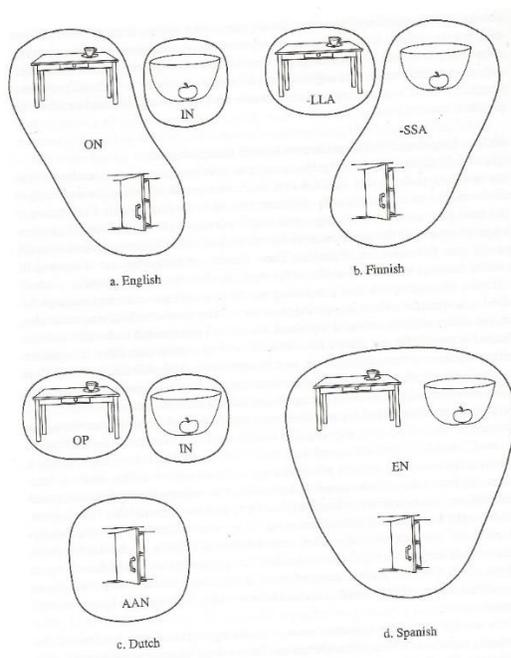
Unlike the CONTAINMENT schema, there have been fewer investigations into the CONTACT schema (Peña 2008). Yet it has been listed as a fundamental schema since the inception of image schema (Johnson 1987; Lakoff 1987). CONTACT is defined as when two objects touch (Hedblom et. al 2017). This may be on a two-dimensional scale with an emphasis on surface contact (Peña 2008) or utilizing force dynamics as a kind of SUPPORT (Navarro i Ferrando 1999). The SUPPORT schema draws its understanding from the principles of force dynamics. These basic principles are encoded in languages in what Talmy (1988) identifies as force patterns. These include Talmy's Steady-State Force pattern where one entity exerts force over another to overcome or maintain its state and the idea that objects in contact exert force

upon one another in equilibrium. (Talmy 1988; Vandeloise 2006). These subgroupings of the SUPPORT schema are called CONTROL and CONTACT (Navarro i Ferrando 1999).

Image Schema and Spatial Terms

Johnson, Lakoff and others have grouped schemas together based on similarities like semantic domain. One of the largest being the spatial domain. Linguistically these patterns are expressed through spatial terms. There are numerous investigations into the spatial terms across different languages (Herskovits 1986; Lakoff 1987; Brugman 1988; Vandeloise 1991; Choi & Bowerman 1991; Cuyckens 1993; Dewell 2005; Navarro i Ferrando 1999; Tyler & Evans 2003; Tyler et.al 2007). Many of these studies reveal that image schemas are not distributed equally across languages. Each language has its own perception of spatial patterns and as such different means of expression. These different perspectives are also grouped according to a mutually agreed upon criteria built from a community's shared worldly experience. What may appear as the same interaction to one may be two entirely different interactions to another. As seen in the Figure 2 from Bowerman (1996), the basic experiential patterns that humans experience are expressed in a variety of ways cross-linguistically.

Figure 2: Spatial terms: Cross-linguistic manifestations (Bowerman 1996)



Since spatial relations can be linguistically expressed in a multitude of ways it is worth investigating diachronically. Historical linguistics can provide insight into the cognitive processes within language evolution (Baldi & Dussias 2012). Studies with a historical overview have helped to broaden the understanding of different senses and the development of certain constructions (Cuyckens 1999; Peyrube 2006). Within investigations in historical semantics, it is important to be aware of the context of the text. Referents have changed over time. Words may have not only had different connotations but also entirely different meanings (Kay & Allan 2015).

Norwegian Prepositions

Norwegian, like English, belongs to the Germanic language family and utilizes prepositions to express spatial relationships in language. CONTAINMENT scenarios in Norwegian are typically represented with the preposition *i* (in) or *inn* (into). *Inn* is inherently directional, while *i* is more ambiguous. *I* is often assigned a static and purely locative meaning (Tungseth 2008). However, its more ambiguous nature allows it to refer to dynamic scenarios with a directional aspect without the support of *inn* (Szymanska 2010).

The Norwegian preposition *på* is taught to students in scenarios involving either contact or destination. Generally translated as “on” it is also sometimes translated as “at” to highlight the dynamic nature of the scenario. Studies indicate that choice for either sense is dictated by the nature of the prepositional object or landmark (Szymanska 2010; Egan & Rawoens 2017). Egan & Rawoens’ study on Norwegian and Swedish translations of locative “at” further categorizes landmarks by their characteristics. Buildings, institutions, and parts not related to the body were the most common landmarks associated with *på*. They also noted extensive crossover with *i*’s most common landmarks: towns, buildings, and parts.

These similarities are also noted farther back in Norwegian’s history. Old Norse *í* and *á*, the predecessor to *på*, have been shown to refer to movement in the accusative and location in the dative case (Fårlund 2004; Barnes 2008). Though some scholars define them as “in” and “on” with respect to object’s interior and exterior, Barnes notes that both prepositions may be translated as “in”, “on” and “at”. This is particularly prominent in reference to time (Barnes 2008).

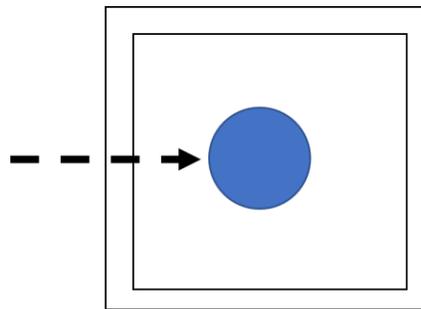
Chapter 1: Diachronic Analysis of *i* and *på*

Methodology

Part One of this study will explore the schema and image schema transformations associated with Norwegian prepositions *i* and *på*, as it relates to their overlaps in translation across time. It will focus on their iterations in Old Norse, Old Norwegian, Middle Norwegian, and Modern Norwegian. The targeted schemas for this project are ENTRY, ENCLOSURE and CONTACT as all versions of *i* and *på* are translated as either “in” or “on”.

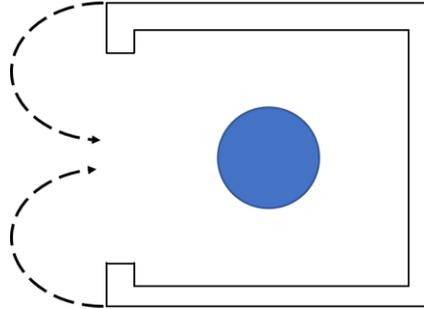
The ENTRY schema is defined as the intersection between a trajector (TR) and its landmark (LM).

Figure 3: ENTRY schema



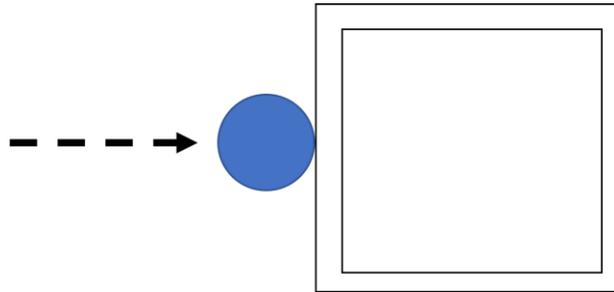
ENCLOSURE is defined as the encapsulation of the TR by the LM.

Figure 4: ENCLOSURE schema



And the CONTACT schema will be defined as the meeting of two boundaries.

Figure 5: CONTACT schema



To evaluate the different transformations of each schema this study will focus on features of the landmark. Drawing from previous studies of CONTAINMENT and locative prepositions (Dewell 2005; Egan & Rawoens; Herskovits 1986) the landmarks will be placed into general categories and then assessed on their perceived physicality to determine where they land on an empirical scale of rigidity. The landmarks will be categorized as follows.

Buildings

Buildings constitute a walled space. These may not necessarily have a roof, nor do they require walls on all sides. Examples may include castles, houses, churches, halls¹, and lofts.

Geographic Features

Geographic features are objects that exist in nature and are easily recognizable. These can be forests, waterfalls, fjords, and mountains. A single rock would not normally fall under this category unless it possesses unusual enough characteristics to act as a vantage point. These are the basis for *landmarks* in Talmy's *trajector-landmark* model. A road or path also serve as geographic features as during the Old Norse period, though they would be man-made, they are the result of manipulating nature. They exist as a part of the natural landscape. Examples include valleys, paths or roads, mountains, bodies of water, forests, beaches, and quarries.

Institutions

Unlike buildings, institutions may not have physical walls, but regardless their boundaries are well defined. They may be made up by a series of buildings or natural features. Prime examples include towns, cities, and countries. Some examples include gardens, and farmsteads. There may be overlap when institutions exist as a single building. Examples of these include schools, hospitals, and libraries.

Objects

Any sort of physical item or tool, manmade or otherwise, that may be interacted with in the physical world. These may be things like, rocks, shields, plates, bags, trees etc.

¹ These are halls in the traditional Nordic sense of a long single room building where activities such as eating, drinking, planning, and sleeping take place, rather than the American English sense of a long, enclosed space connecting one room to another.

Objects En Masse

A collection or grouping of objects, people, or buildings. This does not include mass count nouns. While they are made up of collection of smaller parts, they are still understood as a single entity.

Old Norse í and á

Old Norse is a Northern Germanic language spoken from the 9th – 11th centuries in the Northern regions of Europe, predominately the Nordic countries (modern day Denmark, Sweden, Norway, Iceland, and Greenland) as well as the northern parts of Britain (modern day Scotland, and the Orkney and Shetland Islands). It should be noted that what is considered academic Old Norse is not a true representation of reconstructed Old Norse. Many of the texts and manuscripts labeled as Old Norse are Old Icelandic. However, given the small body of texts available in Old Norse, Old Icelandic is closest option.

For this section, ten texts were selected based on the availability of their English glosses for the sake of time. Selections from *Grettis Saga*, *Snori Edda*'s prologue, Ari Þorigilsson's *On the Settling of Iceland*, *Njáls Saga*, *Egils Saga*, *The Battle of Stamford Bridge*, *The Tale of Þóðvarr Bjarki*, *The Waking of Angantýr*, *Völuspá*, and the *Hávamál* can be found in Old Norse through UT Austin's Norse Base Form Dictionary (UT Austin). Though *Grettis Saga* and *The Tale of Þóðvarr Bjarki* are dated to 1400 they are used in the traditional body of text for Old Norse studies and kept as such. 101 concordances for í and 66 concordances for á were extracted from the texts. The glosses for each prepositional object were cross checked between UT Austin's *Old Norse Dictionary*, UCPH's *Dictionary of Old Norse Prose* (when applicable)², and UiO's collection of the Fritzner, Zoëga, and Cleasby Vigfusson dictionaries.

Types of CONTAINMENT in Old Norse

² The University Copenhagen's *Dictionary of Old Norse Prose* is still an on-going project and not all entries have been created or completed.

In Old Norse two prepositions, *í* and *á*, may both be translated into English “in”, “on”, and “at” (Barnes 2008). As such, they may both trigger several facets of the CONTAINMENT and CONTACT schemas. Examples of both types of CONTAINMENT, ENTRY and ENCLOSURE are present in the Old Norse dataset.

The ENTRY schema

The ENTRY schema depicts a trajector entering a landmark (See Figure 3). While all landmarks may function as containers, within the dataset, the landmarks with clearly defined physical boundaries appear most frequently with this schema. The following examples represent the most common iterations.

1. Eptir þat kveldar ok drífa menn í hollina... (BB)

Soon evening came and rushed men in the hall...

2. ...þaðan koma döggar, þærs í dala falla... (V)

...thence comes the dew which falls in the dale...

3. ...ok tók er lá á þekjunni... (NS)

...and took an arrow laid in the thatch...

The most common types of containers are, unsurprisingly, natural containers. Sentences 1 and 2 feature a building and a geographic feature with a cavity. Sentence 3, in comparison, is an unlikely container, but possesses the characteristics, nonetheless. Thatch, though not as rigid as a wooden building or a mountain side, is compact enough to hold its shape upon penetration.

The ENCLOSURE schema

If the ENTRY schema defines a relationship where a trajector enters a landmark, then the ENCLOSURE schema highlights the opposite, where a landmark envelops a trajector.

Landmarks in this schema are more flexible. Among the Old Norse texts, examples of these include hands, cloaks, shields, liquids, and objects en masse.

4. ...sinn þreif í með báðum höndum (GS)

...he grabbed hold with both hands

5. ...ok þreif í feldinn stundar fast. (GS)

...and took hold of the cloak fast.

6. "Kriúpum vér firir vópna (BSB)

(valtæigs) brøkon æighi

(svá bauð Hilldr) at hialdri

(haldorð) í bugh skialdar;

We do not creep

before the clash of

weapons in battle

into the (protecting) curve of a shield

7. ...ok fyrir því drekti guð heiminum í sjávangangi ok öllum kvikvendum heimsins (SE)

...and therefore God submerged the land in flood and all the creatures of the land

8. Bøðvarr gengr þangat til ok spyr hverr þar væri í beinahrúgunni. (BB)

Bödvar went over there and asked who was in the bone pile.

While all the examples above depict an enclosure, there are two ways in which they do so.

Examples 4-6 are flexible in nature. In Sentence 4, Glamr's hands envelope as much as they can of Grettir. Sentence 5 wraps around Grettir's hand as he picks it up and in Sentence 6, the natural curve of the shield engulfs the warrior, thereby protecting them from harm. Examples 7 and 8, on

the other hand depict landmarks that are naturally permeable but possess fluid-like properties either from being made up of fluid itself or from the fluid-like nature of *objects en masse*.

Metaphoric examples

Abstract uses of the CONTAINMENT are made possible through the general metaphor CONCEPTS ARE CONTAINERS.

9. Hon segir:

“Ek mun ganga til gjálfrmara;
nú hilmis mæR í hugum góðum:”

She said:

“I will go to my ocean-steeds³.

Now the prince’s maid is in good spirits/mind:”

10. Ok í þesse ræið fell hestrenn undir hanum (BSB)

And during this ride the horse fell under him

11. Ísland bygðisk fyrst ór Norvegi á dögum Haralds ins Hárfagra (OSI)

Iceland was settled first from Norway in the days of Harald Fairhair

Though none of these landmarks exist on the physical plane, they can still be visualized as functional relationships between the landmark and its trajector. Example 11 features the metaphor EMOTIONS ARE CONTAINERS. The prince’s maid (TR) is surrounded by good spirits (LM). Whether this is an example of ENTRY or ENCLOSURE is up to debate. Abstract by nature, emotions do not have physical characteristics in which to define a pattern of

³ A kenning meaning “ships.” “Now I will go to my ships.”

movement. And with the lack of contextual support on the nature of the container, a choice cannot be confidently made.

Sentences 10 and 11 are examples of the metaphor TIME MOVES ALONG A BOUNDED PATH. Time has been noted to take on many forms. One of the most prominent metaphors is TIME MOVES. There are two viewpoints in the TIME MOVES metaphor: one where a person faces the future with their back to the past, and one where they are anchored in the present as time flows towards the future. Both are equally natural and exist parallel to each other (Lakoff & Turner 1989; Boroditsky 2000). In Old Norse, however, the anchored viewpoint takes precedence in constructions triggering the both the ENTRY and ENCLOSURE schemas.

Time flows forward continuously on a path anchored by the past and the future. As an object enters the path, it is engulfed by it. In Sentence 11 for example, “the days of Harald Fairhair” were already in motion before Iceland was settled. As “the settlement of Iceland” enters the period of Harald Fairhair’s rule it simultaneously becomes a part of it. In this scenario, the anchors or boundaries are defined by the dates of Harald Fairhair’s rule effectively creating a sense of containment.

CONTACT in Old Norse

As one of the fundamental schemas it is no surprise that there are numerous examples of CONTACT throughout Old Norse. Examples 12 and 13 showcase an understanding of standard contact on a horizontal flat surface.

12. Þar er Ingólfs höfði kallaðr, fyr austan Minþakseyri, sem hann kom fyrst á land (OSI)

There is Ingolf's Head called, east of Minthak's Shoal where he came first to land

13. ...en Grettir á hann ofan (GS)

...and Grettir on him

Example 12 describes the location Ingólfr Arnarson⁴ first came to Iceland. In this scenario he makes contact with the land through his footsteps. The physical boundary of the bottom of his boot, acting as a part of him metonymically, encounters the earth, a part of Iceland's geological make-up and visual boundary. Both sentences exemplify the trajectors (Ingolf and Grettir) coming into contact with a flat surface. While land is generally more perceivable as flat, when a human is hit with enough force to be knocked down, the body conforms as much as possible to the surface below. In this case, the man Grettir fell on was on the ground, which is generally perceived as flat unless otherwise specified.

Metaphoric examples

Metaphoric examples of CONTACT schema involve mapping the spatial relationship between objects on to abstract concepts. In doing so, these concepts are viewed as objects that may interact with others as if they were in the physical realm.

14. ...fyr vestan Qlfossa er hann lagði sína á eigu síðan (OSI)

...west of Ale-Force River which he laid his possession later.

15. Gunnhildr mælti: "Sjá kann ek á þessu, Arinbjörn, at þú ert hollari Agli en Eiríki konungi (ES)

Gunnhild said: I can see (this), Arinbjorn, that you are more loyal to Egil than King Eirik

⁴ Ingólfr Arnarson is considered the first person to settle in Iceland permanently in 874.

The two mappings above are made possible with the metaphors STATES ARE OBJECTS, SIGHT IS AN OBJECT and CONCEPTS ARE OBJECTS. Example 14 sees “possession” as the TR and “the land west of the Ale-Force River” as the LM. In this scene, Ingólfr Arnarson lays his “possession” onto the land. In other words, he takes possession of the land. In this stylistic writing, the state of possession is viewed as an object that can be placed upon the land west of the Ale-Force River. Perceived as an object his possession can now conceptually make horizontal contact with the land, a flat surface. A similar mapping occurs in Example 15. Here Gunnhild’s sight becomes the object propelled forward to collide with the idea that the other person is more loyal to Egil than to King Eirik. However, there is no contextual information to indicate whether these concepts are perceived as flat or horizontal.

Together with Secondary Prepositions

Í and á also appear together with secondary prepositions mót (meeting) and miðli (between). Secondary prepositions are a subclass of Old Norse prepositions that started off as nouns (Fårlund 2004). Rather than preceding the secondary preposition with the similar meaning, í and á have been seen with either one.

16. ...færi á miðli Norvegs ok Íslands... (OSI)

...would travel between Norway and Iceland...

17. Í þann tíð var Ísland viði vaxit í miðli fjals ok fjöru. (OSI)

At that time Iceland was covered with forest between the mountains and the beach.

18. Björg ok steina þýddu þeir á móti tønnum ok beinum kvikvenda. (SE)

They likened the rocks and stones to the teeth and bones of living creatures.

19. ...ok því brauzk hann í móti af öllu afli at fara út. (GS)

...and for this he strove with all his might against leaving.

It would seem *í* and *á* are purely functional in these contexts, serving only as a grammatical connection rather than evoking a schema. The schema, instead, appears to be rooted in the secondary prepositions.

Discussion

Landmarks with more rigid and structured characteristics align most often with the ENTRY and CONTACT schemas in Old Norse. In comparison, the ENCLOSURE schema is seen with more malleable landmarks. These landmarks do not need to be fluid-like per say but possess the ability to bend and move when acted upon by gravity or the force of the impact. One of the source domains for metaphoric uses of ENTRY and ENCLOSURE is very similar to the fundamental feature of the CONTACT schema. Bounded spaces are often represented like two-dimensional plane or a flat surface. And temporal landmarks do not seem to prefer one preposition over the other. Both uses provide little to no semantic change.

While there are little to no examples of the other physical landmarks appeared in the data, it is not unreasonable to conceive that they could have been used as prolifically. The bias toward *institutions, buildings, and geographic features* is most likely due to the nature of the texts. All but one text for the Old Norse section are sagas and therefore deal with the heroic deeds. Such deeds include visiting kings and traversing the landscape. *The Battle of Stamford Bridge* is a firsthand account of the battle and consists of interactions with institutions and geographic features.

Old Norwegian *í* and *á*

Old Norwegian is the name given to the dialect of Old West Norse spoken primarily in Norway from the 11th – 14th centuries. Prepositions *í* and *á* do not undergo any morphological change in Old Norwegian and are rendered the same in the orthography. This distinction marks the subsequent break down of Old West Norse into its daughter variants: Old Norwegian, Old Icelandic, Old Norn and Old Faroese. While some scholars find this distinction to be merely a matter of convention, the most obvious difference between Old Norwegian and Old Icelandic is the loss of initial h in consonant clusters *hl-*, *hn-*, and *hr-*. Given Old Norwegian is a transitional period between Old West Norse and Middle Norwegian there are few true Old Norwegian texts available to review. As such this section works with texts that were only written in Norway from the 11th to 14th centuries. Given availability and time this amounts to five texts in the Menota corpus: *Olafs saga in helga*, *Konungs skuggsjá*, *Gammelnorsk homiliebook*, *Barlåms ok Josaphats saga* and *Thómass saga erkibiskups*; and the *Gammelnorsk runedikt* or Norwegian Rune Poem, a learning tool to help learn runes. Norwegian translations of these texts were cross referenced to help discern the context for each hit.

ENTRY and ENCLOSURE in Old Norwegian

While there is little change in LM associated characteristics in Old Norwegian with many of the same LMs attributed to the ENTRY schema, there is less flexibility apparent between *i* and *a*. In the following examples, *objects*, *institutions*, and *geographic features* appear as containers.

20. blasa hatt i luðra oc kalla

blows long into the horn and calls (BJS)

21. En æf ukunn eru þer kaup i bæ

If you are not familiar with trading in a town (KS)

22. þa hættu sialfr at læggiaz i hof

stop oneself to lay in the sea⁵ (KS)

Though each trajector may feature on differing points on the spectrum of rigidity, they all maintain some sense of it. The LM in contrast, exhibits varying levels of rigidity. Depending on its structural properties, it envelops the TR in a different way. The horn in Example 20 remains firm, funneling the air through its boundaries, while Examples 21 and 22 are less apparent. Though Example 21 may not be made of clear walls, the onlooker nonetheless understands what marks the edge of town versus the center. The boundaries are made up of a multitude of buildings and even if they are not physically connected, they encompass a larger concept. In comparison the LM in Example 22's boundaries may appear more distinct, but it is fluid in nature.

As previously mentioned, the ENCLOSURE schema appears when a LM's characteristics are more flexible. This may result from the nature of the LM itself or the way it is being used. The following are examples of both in Old Norwegian.

23. fòðesk í skóge (RD)

lives in the forest

24. kælr í froste (RD)

chilled by frost

⁵ To stop setting sail

The forest encompasses the living space of the speaker in Example 23. They are surrounded by the flora that make up the forest. While an individual tree may not be considered very flexible, en masse they take on a more fluid nature and move to contain the house. Example 24 expresses a similar concept. The frost overtakes the object and reduces its temperature. Example 24 also entails ENCLOSURE as the sea is fluid and rushes to fill disturbed space.

Metaphoric examples

Old Norwegian maintains many of the same landmarks as seen in previous iterations. *Objects, and institutions* appear with similar frequency while *states appear* with increasing frequency. This may be due in part to the more Christian oriented nature of some of the texts in this period. With this comes a rise in abstract concepts for speakers to reason with. In expressing these concepts, Old Norwegian speakers turn to their bodily experiences as a means of perception. Example 25 utilizes both the STATES ARE CONTAINERS and the CONCEPTS ARE OBJECTS metaphors.

25. midli í hværri cvöl ok í mǫðe (KS)

ENTRY

mercy in suffering and in exhaustion

The concept of mercy, now given physicality can freely enter the newly established boundaries of states of exhaustion and suffering.

26. þeir calla á sína tungu Loghica (KS)

ENCLOSURE

they called, in their tongue, Loghica

Example 26 features metonymic landmark, tongue, in place of language, enveloping the words spoken. Tongues are quite flexible, and it would be intuitive to source its curling movements as a domain for spoken language.

CONTACT in Old Norwegian

CONTACT's association with flat horizontal surfaces remains largely the same in Old Norwegian as it did in Old Norse.

27. løypr ræinn á hjarne (RD)

the reindeer ran over the snowpack

28. oc hann kom á þeira fund (KS)

and he came to their meetings

In Example 27 the reindeer's hoof (TR) strikes the flat surface of the snowpack (LM). Unlike fresh snow where steps would sink down, snowpack is made from the buildup of many layers of snow when the weather is cold enough to prevent melting. In comparison, the nature of the landmark (meeting) in Example 28 is not as easily indicated. A meeting is group of gathered people for a purpose. It does not just consist of the group of people but of the space where the meeting takes place, constituting a flat bounded surface where the boundaries are the people themselves. As such, the TR (he) outlined by the physical boundaries of his person, encounters the meeting's boundaries.

Metaphoric examples

Like Old Norse, the examples of metaphoric uses of CONTACT also feature objects as the source domain. The example below features the WORDS ARE OBJECTS metaphor.

29. Konongrenn svarar a anndværðum man (OS)

The king responds to the man face to face [with him].

When perceived as objects with three dimensions, words can interact physically. Their newly acquired boundaries may now operate on the same plane as a physical one (the man standing face to face with the king). This is also an example of lateral contact, denoted by the phrase “face to face”. While the nature of the metaphoric conceptualization of “words” is not described in the example, the nature of the LM (the man) is. The man and the king are facing each other. The king’s words then leave his mouth and connect with the man’s face which is located on a side of this body, not the top or the bottom.

Possible Overlap

30. hvært sinne er þu færri i haf (KS)

how you fare on the ocean

The example above features the landmark “ocean” paired with the preposition *i*. A cursory reading would suggest that a type of CONTAINMENT is at play. The ocean’s inherent characteristic of comprising of water would certainly lead to attribute to the ENCLOSURE schema. And it is not unthinkable to envision a person (TR) making their way out to sea (LM) on a boat as the waves close in around them. However, in comparisons with translations into Modern Norwegian, the preferred translation uses the present-day iteration of *a—på*. And after deliberating with the Norwegian consultant for this project they confirmed that this scenario is consistent with a CONTACT-based reading. This would imply that the ocean (LM) is perceived as flat surface and both the person and the boat together the contacting trajector. While there is no way of knowing for sure which perception is driving the choice as it appears that both *i* and *a*

can both refer to types of CONTAINMENT and CONTACT like in Old Norse, the accompanying verb “fare” seems to suggest an inquiry into a person’s seamanship.

Discussion

This data from Old Norwegian adds to the growing list of examples of landmarks with flexible characteristics. CONTACT in Old Norwegian is also seen with the lateral planes of the landmark as well as with the horizontal planes that seemed to dominate the Old Norse dataset. Also noteworthy is the use of “ocean”. As a body of water and the most fluid of all, it should be a textbook example of ENCLOSURE, yet from its context it could trigger at CONTACT-based reading. It is unfortunate that no other examples feature ocean were found in the data. It is also possible that due to the small sample size of available texts to study that there is not enough evidence to reflect any changes. There were also some issues in translating and cross-referencing the texts. Translations for the chosen texts were helpful in discerning the general meaning of the text as a whole, but they were not detailed enough to discern the nuances in meaning on a sentential level. A more detailed study is needed for future inquiries.

Middle Norwegian i, a, and på

Much like Middle English, Middle Norwegian is considered the transitional stage between Old and Modern Norwegian and was spoken from 1350-1550. It marks the last period of Norwegian rule before push for Danish spread across the country. Therefore, the body of texts remains small. This section utilizes the *Dipolmatrium Norvegicum*, a collection of diplomas and treaties from 1050-1590 with the *Oluf Rygh: Norwegian Farm Names* (vols. 1-17), a database of Norwegian farm names from across the country for cross-reference.

The diplomas and treaties were selected randomly and translated with the help of a Norwegian consultant and the University of Copenhagen's *Dictionary of Old Norse Prose*. However, the vast amounts of dialectal variation, including at times *på*⁶ appearing in place of *a* from a clipping of *upp á*, made translations difficult. Ultimately eleven treaties from 1300-1451 and the essay *Om Norgis Rige* (1567)⁷ by Absalon Pederssøn Beyer made up the body of Middle Norwegian texts for this study.

CONTAINMENT and CONTACT in Middle Norwegian

Given the closed nature of prepositions, the landmarks associated with CONTAINMENT remained largely the same as they were in Old Norse and Old Norwegian. *Buildings, institutions, objects, and geographic features* are the most common type of physical containers. The majority

⁶ Seen as either *a* or *på*, the later becoming the official rendering of *å* in Danish and Norwegian alphabets.

⁷ While 1567 falls past the official end date for Middle Norwegian, Absalon Pederssøn Beyer, an author, and Lutheran clergyman, is famous for his Anti-Danish sentiment and Pro-Norwegian ideals when it came to language. He is known for insisting on writing in only Norwegian.

of which corresponded with the ENTRY schema. In the examples below the landmark and trajector relationship is underlined when necessary.

31. [they] hæntado sin vapn oc sprungo j båt oc rodho efter Haluarde (ONR)

[they] fetched their weapons and sprung in the boat and rowed after Haluarde

32. kalled i hans stedt (ONR)

called in his stead

33. plage komme på land oc riger (ONR)

[a] plague/calamity comes to the land and kingdom

As seen in the previous datasets CONTAINMENT scenarios exhibiting ENTRY take a more concrete landmark (boat and authority via the metaphor CONCEPTS ARE OBJECTS). In the CONTACT scenario both landmarks are perceived as bound spaces. Norway having a long coastline possesses an easily discernible boundary of ocean and kingdoms are made up of numerous buildings and fortifications that clearly demarcate the land. No explicit examples of ENCLOSURE could be found in this dataset.

***i* and *a* usage in naming conventions and the PART-WHOLE schema**

While *i* and *a* prepositional usage for prose remained largely the same, the Middle Norwegian data set revealed many examples of common naming conventions. This study's data set for Old Norse focuses on the sagas and available written reports, which often portrayed larger than life characters with deep cultural connections to the people. As such they tended to have names that were derived more from their appearance and deeds, rather than where they were from or associations, they were a part of. The *Diplomatarium Norvegicum* and the *Norske Gårdnavne*,

the source for the Middle Norwegian dataset, compiles local treaties and documents among the municipalities in Norway and as such would detail the life of the everyday person.

What is interesting within common naming conventions within this dataset is that the everyday people were differentiated by their settlement of origin or formal association.

34. Jone a Fosse

Jone from/of Foss

35. Hogne j Ræyðar fyrðe

Hogne from/of Reafirth

36. Oluff i Bergenn

Olaf from/of Bergen

A basic settlement in medieval Scandinavia consisted of a farm. The larger the community became the more a need for protection and authority grew. More developed areas benefited from the authority and protection of the local *frydde* or parish (*sogn/sokn*) and as the local economy grew some parishes further developed into towns and cities. Parishes in Medieval Scandinavia were often seen as parts of the town itself. Originally referring to the land surrounding the church, this land was often demarcated with trenches, fences, or stone walls. Some settlements were walled for protection as seen in Figure 6, providing a visceral sense of containment for inhabitants.

Figure 6: Map of Trondheim (1681) outlining its farms (A-L) (Unknown 1681)

Depending on the type of settlement the person was from, either *i* or *a* or their regional counterparts were used. From the data set an interesting pattern emerged. People from farms and parishes, took either *i* or *a* (NAME *i/a* FARM/PARISH). And when they were from a city or a part of a formal association, they predominately took *i* (NAME *i* CITY/ASSOCIATION).

This leads to the idea that based on the size of the settlement there was a preferred preposition. And as evidenced in the previous data sets of Old Norse and Old Norwegian, prepositions *i* and *a* are each linked to a dominant image schema. This being CONTAINMENT, subdivided into ENTRY and ENCLOSURE for *i* and CONTACT for *a*.

It is also of note that these uses are distinct from their positions as direct objects within locative constructions. In these constructions, evidenced in Examples 31-337, preposition usage and the subsequent schemas align have a more rigid structure. The CONTAINMENT schema appears together more often with *i* and its regional variant *j* while the CONTACT schema appears with *a* and its regional variants *å* and *på*. There is significantly less cross over than in previous eras. An overlap does, however, appear among naming conventions. While there appears to be a slight preference for *i* when referring to someone from a parish and those from farms with *a* the schema evoked by either preposition is the same. In naming conventions and reference titles, *i* and *a* can be found evoking the PART-WHOLE schema.

The PART-WHOLE schema refers to an entity made up of other working components (Lakoff 1987). Its dynamic nature derives from the part separating itself somewhat from its source, providing emphasis or distinction for the part. This may be seen from another perspective as a form of CONTACT as contact between the part and whole can be maintained. It may also coexist with the CONTAINMENT schema as the part may remain within the whole. In the case

of Middle Norwegian naming conventions, the person is the part and their hometown the whole/source. The frequency of *i*-parish constructions may come from both the physical layout of the parish, but also the community's idea of a parish.

This is also exhibited in non-topographic prepositional phrases such as associations or organizations.

37. Einar i Drotningar garde

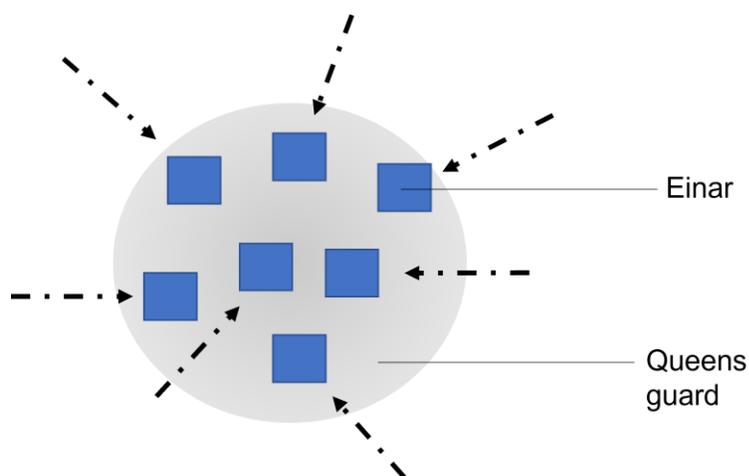
Einar of the Queen's guard

38. Amundi i Drotningar garde

Amund of the Queen's guard

As with toponymic prepositional phrases the PART-WHOLE schema comes into play. The association or organization acts as the WHOLE while the person is the PART.

Figure 7: Einar joins the Queen's guard schematic



As illustrated above in Figure 7, Einar is a part of the whole of the Queen's guard. He may exist separately from the group, but the Queen's guard would not exist without Einar and his fellow

members. In this scenario, the WHOLE or LM (depicted as the shaded area above) is a group of people and Einar, joining the group, the TR. This evokes the ENTRY schema. Yet, due to the fluid-like nature of a group or *objects en masse*, it also triggers the ENCLOSURE schema.

Discussion

The Middle Norwegian data appears to uphold the required characteristics for the ENTRY and ENCLOSURE and CONTACT schemas. It also introduces the PART-WHOLE schema in naming conventions. From the way the PART-WHOLE schema is configured it utilizes concepts found in ENTRY, ENCLOSURE and CONTACT. This would allow for both prepositions to be used interchangeable in these contexts without specifying which schema was evoked.

Modern Norwegian i and på

The Protestant Revolution and the union between the Kingdoms of Denmark and Norway mark the beginning of the Modern Norwegian language. This, however, places it around 1536 and it continues to be used today. Given the abundant collections of texts and data available with the many advances in technology, for the scope of this study, Modern Norwegian data was gleaned from a single internet corpus from the present day, Norwegian Web 2017 Corpus, Bokmål (noTenTen2017). Should this study be expanded upon in the future, it would benefit from a more narrowed view of Modern Norwegian from its dated beginning to present day. Within the noTenTen2017 corpus, websites were narrowed to only those with Norwegian domains (.no). As such they consisted of a several blogs, news sites, and forums. Concordances centered on prepositional objects to better understand the characteristics involved in triggering specific schemas.

CONTAINMENT and CONTACT in Modern Norwegian

Coming into the modern age of Norwegian, many of the CONTAINMENT schemas associate with the same landmarks of previous eras. *Buildings, geographic features, and objects* structured in a way to portray empty spaces and cavities as a point of entry are still strongly associated with the ENTRY schema. Landmarks like *institutions* and *objects en masse*, where its perceived shape and quality allow for more permeability continue to favor the ENCLOSURE schema. In comparison, the CONTACT schema remains associated with both lateral and horizontal planes. This data set also sees roundness joining the acceptable landmark characteristics.

39. Han døde i armene mine , og jeg kjenner ennå sorgen.

He died in my arms, and I still feel the sorrow.

40. Vi samles i butikken.

We gather in the store.

41. Moren har heller ingen planer om å sende dem på skolen av redsel for å bli kastet ut av leiligheten.

The mother does not have any plans to send them to school out of fear of being thrown out of the apartment.

42. ...men keeper fikk en finger på ballen.

...but the keeper got a finger on the ball.

Examples 39 and 40 feature different aspects of CONTAINMENT previously featured in the other eras. The structured nature of a building (the store) leads to the ENTRY schema, while the more flexible nature of a pair of arms reflects the ENCLOSURE schema. The bounded nature of “the school” in Example 41 allows for the CONTACT schema to take effect in this hypothetical situation. The flat nature of the bounded space, wherein the school’s buildings and other physical additions (ie. fences and fields) surrounding it act as the boundaries, have the potential to encounter the woman’s children should she make the decision to take them. Example 42, in contrast, features a landmark with round characteristics (the ball).

Outside influences in preposition crossover reduction

Authority like the flow of time can cause language to change as seen in the transition between Old Norwegian and Middle Norwegian with the instigating of Danish as Norway’s formal written language and the creation of Nynorsk in a later push back. Other groups have

asserted their authority over the Norwegian language attempted to push toward standardization. The Language Council of Norway is a subsidiary of the Ministry of Culture and one of two organizations in charge of language standardization. Under their authority, they have released a webpage on preposition usage. Here they detail the standard rules around what object features constitute specific prepositions, leading to a list of criteria for each schema to meet.

According to the Language Council of Norway, large cities, harbors, houses, buildings, regions, and districts with container-like natural landmarks should take *i* as their preposition. These include *Bergen*, *Drøbak* (a harbor town), *Asia*, and *Setesdahlen* (a district of in the Setes Valley of the same name). In contrast, districts within cities and towns, city streets and islands traditionally take *på*. These examples include, *Blindern* (the main campus of the University of Oslo), *Storhaug* (a borough of Stavanger meaning “big hill”), *Majorstua* (a residential neighborhood) and *Iceland*. These distinctions provide a clear picture to Norwegian speakers and learners on the nature of the relationship between the subject and the object via preposition. This leads to less crossover between image schemas and a reduction of different bodily perceptions in Norwegian.

Though discrepancies remain documented. Some islands like Japan, Lofoten, and the United Kingdom take *i* although the standard island locative preposition for islands is *på*. This may play into the fact that many of the examples here and on their information page are actually archipelagos and as such exhibit a relationship closer to the ENCLOSURE schema visually represented previously in Figure 7.

Changes in previous phenomena

However, there appears to be a movement towards rigidity when it comes to schema crossover in naming conventions. As referenced in the previous section, Middle Norwegian toponymic phrases for people could take either *i* or *a*. In Modern Norwegian, however, it appears that this construction has died out in favor of surnames. Should the connection between a person and their hometown be established a different preposition other than *i* or *a* is used. In the noTenTen2017 Norwegian corpus, constructions NAME + *på* + INSTITUTION constructions trigger the CONTACT schema while NAME + *på* + SETTLEMENT constructions trigger the ENCLOSURE schema.

43. i fjor høst var Simen Aronsen på TV2 sammen med Nina Solheim

last fall Simen Aronsen was on TV2 together with Nina Solheim

44. “skråblikk på praksis” forteller veterinær Ketil Løland Jakobsen på Lillehammer

“[It’s] a funny way to see [it]” says veterinarian Ketil Løland Jakobsen in Lillehammer

Unlike in Middle Norwegian, Example 43’s TV2 is not referenced as the CONTAINER they became a part of, but the object in which they are in contact with. There the metaphor CONCEPTS are BOUNDED OBJECTS comes into effect. The tangibility of an object is mapped over to the intangible television channel thereby granting it physicality and boundaries in the conceptual frame of the speaker. Once this has been achieved both Simen Aronsen and Nina Solheim, both recognized as physical beings to the speaker, are able to encounter TV2.

In contrast, Example 44’s *på Lillehammer* is purely locative and does not reference the PART-WHOLE aspect of the NAME + *på* + SETTLEMENT construction as seen in Middle Norwegian. Ketil Løland Jakobsen is not necessarily born and raised in Lillehammer, instead he is merely there at the time of the interview. Constructions in Modern Norwegian equivalent to

the Middle Norwegian one, triggering both the PART-WHOLE and its ENCLOSURE perspective may take either prepositions *av* or *fra*. Though according to the Norwegian consultant to this study, these constructions still sound archaic.

A shift toward less schematic crossover with *i* and *på*

In Old Norse, Old Norwegian, and Middle Norwegian the ENTRY, ENCLOSURE and CONTACT schemas could be triggered with both *i* and *a/på*, indicating a point of crossover for these schemas. As all three schemas deal with bounded objects, it not unthinkable for speakers to use these prepositions interchangeably. However, data from the noTenTen2017 Norwegian corpus suggests that there is a trend toward crossover reduction. Scenarios that appeared to take either preposition skew toward one.

One such scenario involves time. In the previous datasets, temporal landmarks appeared with either preposition in the TIMES MOVES ALONG A BOUNDED SPACE metaphor. The ENTRY, ENCLOSURE, and CONTACT schemas appeared to overlap when the bounded space landmark was perceived as a flat surface. Yet in Modern Norwegian there is a clear push toward the CONTAINMENT schemas when evaluating time.

Table 1: Number of hits with *i* and *på* per temporal landmark

Landmark	<i># of hits with i</i>	<i># of hits with på</i>
<i>tid</i> (time)	93,668	14,601
<i>måned</i> (month)	32,209	692
<i>år</i> (year)	606,271	33,817

Unlike Old Norse instances where *i* and *på* appear together with prepositions *mot* and *mellom* have decreased in Modern Norwegian.

Table 2: Number of hits with *i* and *på* in conjunction with *mot* and *mellom*

Secondary Preposition	# of hits with <i>i</i>	# of hits with <i>på</i>
<i>mot</i>	83,791	1,214
<i>mellom</i>	32,209	13,632

While *i* constructions with both secondary prepositions remains high, only *mot*'s *på* construction has significantly decreased in usage. Previously seen as purely functional when paired with secondary prepositions, the decline in *på* + *mot* pairings suggest that *på* is no longer purely functional and is more heavily associated with the CONTACT schema.

Discussion

Many of the associated landmarks for ENTRY, ENCLOSURE, and CONTACT have not changed from the Old Norse period. Though the addition of round landmarks for CONTACT does appear only in this dataset. This may be due to the limited size of the previous datasets and their content. Otherwise there has been rather small changes in the acceptable characteristics for each schema. This suggests that *i* and *på* are rooted centrally in their specific schemas: *i* in CONTAINMENT and *på* in CONTACT. However, with the standardization of Norwegian there is a marked push in maintaining this distinction. Organizations like the Language Council of Norway strive for common teachable ground in language to ease communication. This ease results in the loss of minute variation in semantic development as the criteria they set down

dominates the speaker's understanding. A more isolated look into whether *i* and *på* could be used in the same context would help to glean whether this is the case.

Chapter 2: Survey of Prepositional Interchangeability in Modern Norwegian

Background

Studies into prepositions have yielded numerous examples of polysemy (Lakoff 1987; Brugman 1988; Vandeloise 1991; Cuyckens 1993; Kristoffersen 2001). Yet most of these studies tend to focus on the various senses encompassed by the preposition and less on possible cross over between prepositions. One such study in Dutch revealed that speakers will first group prepositions together by how they relate semantically. They will also cross these groups should they find another similar scenario. In the same study *na*'s abstract meaning of "posterior location" was grouped with a temporal meaning. In contrast its circumstantial meaning for emotions via "proximal location" was grouped with the spatial meaning (Colomnbo & D'Arcais 1984).

This sense crossover is also found among English prepositions as well. While *on*, *in*, and *at*, each have their own specific spatial meaning once the object of the preposition becomes abstract the difference between them falls to convention. To a native speaker there is little to no distinction between the phrases "in hearing," "on hearing," and "at hearing" (Rice 1992).

Whether or not a speaker perceives the object of the preposition as abstract is reliant upon its physical features. These features lend, in the mind of the speaker, to its level of concreteness. Traditionally concreteness is defined by bodily experience through the five senses: sight, taste, touch, hearing and smell. More concrete words are easier to recall and as such score higher in imageability—how easily a word evokes a sensory image (Paivio, Yuille & Madigan 1968). In a Norwegian imageability study, researchers found that between word classes nouns ranked the

highest in imageability followed by verbs and adjectives. They also found that overall, the more frequent a word the lower its imageability (Simonsen et. al. 2013).

Aim

This study aims to investigate points of sense overlap between Norwegian prepositions *i* and *på*. Given the different image schema and by extension senses associated with *i* and *på* identified in Part One, there may be potential for crossover for speakers in certain contexts. Contexts that isolate the preposition should allow speakers to rely on their sensory recollection of the prepositional object and select the appropriate preposition.

In conjunction with the findings in Part One of this paper, abstract landmarks and landmarks with more malleable features should be able to take either *i* or *på* in an ambiguous context. Concrete landmarks should exhibit a clear preference. This study also seeks to determine if dialect and age play a role in the preposition choice.

Demographics

This study ran for one month (Feb-March 2020) and recruited participants through snowball sampling. The participant pool was restricted to Norway and garnered 88 complete responses. 51% were male and 49% female, ranging in age from 18-51 years or more. 82 participants were native Norwegian speakers and the 6 non-native or unspecified responses were omitted. The 82 participants hail from 8 different *fylkeskommune* or county municipalities (Viken, Vestland, Oslo, Innlandet, Nordland, Vestfold og Telemark, Trøndelag, and Møre og Romsdal) clustering predominately in Eastern Norway. These participants are further broken down into the following age groups.

Table 3: Number of participants per age group

<i>Age Group</i>	18 – 20	21 – 30	31 – 40	41 – 50	51+
<i>Participants</i>	2	24	7	21	28

Methodology

This study focuses on the usage of Modern Norwegian's *i* and *på* in ambiguous contexts. These contexts lack a manner of motion verb and rely on the copula, *er*. Following the corpus results from the Modern Norwegian section in Part One, each ambiguous construction has hits for both *i* and *på*. This brings about the question of whether the prepositions can be switched and still yield the same meaning. Given how image schema describe the functional relationship between the trajector and the landmark, can you switch between prepositions that evoke visually similar schema and still get the point across? This survey strives to answer such a question.

Five different landmark categories serve as the focus of this study: *buildings, institutions, objects, vehicles, and time*.

Table 4: Categorization of selected landmarks

Buildings	<i>sykehus</i> (hospital)
Institutions	<i>Internett</i> ⁸ , <i>hage</i> (garden)
Objects	<i>harddisk</i> (computer hard drive), <i>tak</i> (roof)
Vehicles	<i>bil</i> (car), <i>båt</i> (boat)

⁸ Appears in the survey as the clipped version, *nettet* as it sounded more natural to my Norwegian consultants

Time	<i>mandag</i> (Monday), <i>vinter</i> (winter)
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The specific landmarks for each category contrast each other in different ways. Among the institutions, one is abstract while one is physical. One object is longer than the other. Each vehicle interacts with a different surface and the units of time vary in length. *Sykehus* does not have a partner due to concerns on the survey length. These landmarks were also chosen based on how many hits each landmark had with either preposition in the noTenTen17 corpus.

Table 5: Number of hits of *i* and *på* with selected landmarks

Landmark + DEF	# of hits with <i>i</i>	# of hits with <i>på</i>
<i>sykehuset</i>	1,480	22,170
<i>Internett</i>	653	46,322
<i>hagen</i>	38,327	552
<i>harddisken</i>	85	1,755
<i>taket</i>	19,268	14,786
<i>bilen</i>	56,611	26,252
<i>båten</i>	11,829	7,690
<i>mandag</i>	1,220	33,123
<i>vinteren</i>	444	11,306

A preference for one preposition or the other is evident in the number of *i/på*-constructions in the corpus without regard to context. The higher the hits the stronger the association. Standard Norwegian dictates that in ambiguous contexts where the TR is a human, landmarks *sykehus*,

harddisk, vinter, mandag, Internett, and tak should take *på* while *hage, bil* and *båt* take *i*. This is also reflected in the corpus, where although all these landmarks have hits with either preposition in the same context, there is a clear preference for one.

Participants were asked to read two sentences for every landmark, a context establishing sentence and a prepositional sentence utilizing copula *er*. These target sentences were underlined for their benefit. Each prepositional sentence followed a human trajectory to ensure the same functional relationship as the participants.

Vi filmet overraskelsesbursdagen til Tine. Den er i internettet nå.

We filmed Tine's surprise birthday. It is on the internet now.

After reading the short scenario participants were asked to rate how well it made sense to them on a scale of 0-10 where 0 made no sense and 10 made perfect sense. Each scenario was presented as its own question and the order randomized to lessen the affect one scenario might have on its partner. All questions were made available in either Bokmål or Nynorsk for the ease of the participant and to ascertain whether dialect may play a role in preposition preference.

To avoid confusion in the use of images, as had frequently been the case from previous experience this study employed written scenarios to make sure all participants were presented with the same functional interaction. And although having participants draw out their own schematic representations for each would have been ideal, the limitations in the online delivery method hindered further development.

Results

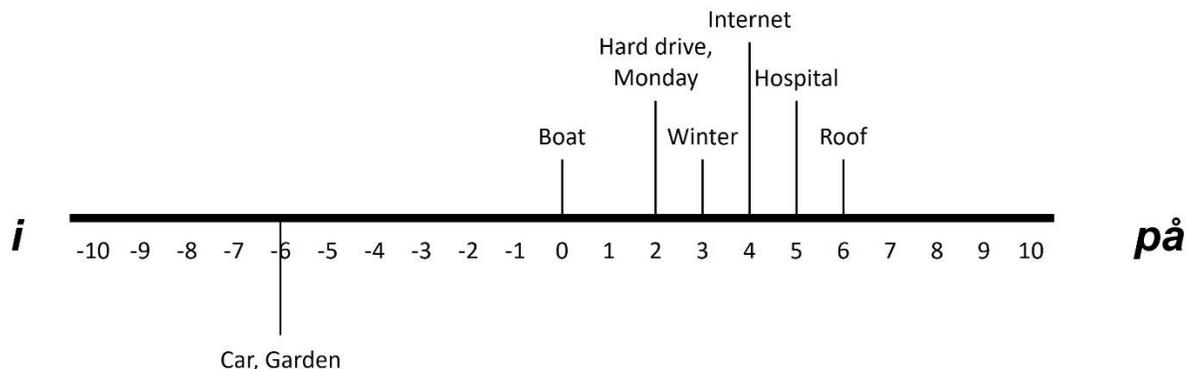
To highlight the difference in preference for a specific preposition I subtracted the ratings for *i* from the ratings for *på* for each response and then calculated the average for every

landmark. The positive values show a preference for *på* while the negative values show a preference for *i* and henceforth will refer to such values.

Table 6: *På* and *i* survey confidence values

Landmark		Mean	Median	Standard Deviation
hospital	<i>sykehus</i>	5.3	6	3.3
boat	<i>båt</i>	0.1	0	3.1
car	<i>bil</i>	-6.1	-7	3.2
hard drive	<i>harddisk</i>	2.0	1	3.3
garden	<i>hage</i>	-6.0	-7	3.2
Internet	<i>nett</i>	4.1	4	3.2
winter	<i>vinter</i>	3.3	3	3.9
Monday	<i>mandag</i>	1.7	1	3.1
roof	<i>tak</i>	6.4	7	3.2

Figure 8: *i* and *på* landmark survey distribution



Though there is a large discrepancy in the ratings for each preposition, in most cases Norwegian speakers have a clear preference for situations that take *i* and situations that take *på*. This aligns with the corpus results. As seen in *Figure 2*, *roof*, *hospital*, *Internett*, *harddrive*, *winter*, and *Monday* favor the positive end of the spectrum and therefore *på*, while *car* and *garden* heavily favor the negative end, *i*. However, in contrast to the corpus results, *boat* lies in the middle of the spectrum at 0.1, showcasing a neutral stance.

Bokmål vs. Nynorsk

Norway is unique in that they have two written standards for their language: Bokmål and Nynorsk. Bokmål stems from Danish spelling, following unification with Denmark while Nynorsk is an amalgamation of 19th century rural dialects, as collect by Ivar Åsen in retaliation to the takeover. As such, Nynorsk is sometimes seen as a better representation of spoken Norwegian. Though this is predominantly in the West, where Åsen concentrated his efforts. This study also seeks to discern whether this distinction between “traditional” and “Dane-ified” Norwegian would affect preposition usage for CONTAINEMNT and CONTACT landmarks. As both standards are accepted by the government, municipalities or *kommune* are asked to choose

one or both to conduct official business in. It is fortunate that the regions that played a role in developing Nynorsk, chose it as their written standard, concentrating mostly in Western and Northern Norway. As such participants were asked what *kommune* they were from and offered the survey in Bokmål or Nynorsk. While participants hail from several parts of Norway (Central, West, North and East) only two choose to take the survey in Nynorsk. Their ratings aligned with the general trend. As such, although limited, the survey indicated that there is no correlation between written standard, dialect, and preposition usage.

Age

This study also explores age as factor in landmark confidence levels. While each age group follows the general trend closely, further investigation yields a more nuanced distinction. The larger the difference between *på* and *i*, the more distinct the scenarios appear to the responder. In *Table 4* *på - i* values are larger for the younger generation (18-40 years) and smaller for the older generation (41+ years), suggesting age does play a role in preposition usage for CONTAINMENT and SUPPORT scenarios.

Table 7: På and i confidence values per age group

Age Group		<i>tak</i>	<i>sykehus</i>	<i>Internett</i>	<i>vinter</i>	<i>mandag</i>	<i>harddisk</i>	<i>hage</i>	<i>bil</i>	<i>båt</i>
18 - 20	<i>på</i>	9.0	9.0	9.0	7.0	6.5	9.0	4.0	4.0	10.0
	<i>i</i>	4.0	1.0	4.0	5.5	4.0	8.5	9.0	10.0	9.0
	<i>på - i</i>	5.0	8.0	5.0	1.5	2.5	0.5	-5.0	-6.0	1.0
21 - 30	<i>på</i>	9.8	9.8	8.1	7.8	3.7	7.9	2.3	1.9	8.3
	<i>i</i>	2.3	4.0	3.0	3.7	1.6	5.2	9.6	9.5	7.3

	<i>på - i</i>	7.5	5.8	5.1	4.1	2.1	2.7	-7.3	-7.6	1.0
31 - 40	<i>på</i>	9.9	9.6	6.1	7.6	3.9	5.4	2.1	1.6	8.4
	<i>i</i>	2.4	2.0	2.0	2.6	0.7	8.7	9.1	8.9	7.1
	<i>på - i</i>	7.4	7.6	4.1	5.0	3.2	-3.3	-7.0	-7.3	1.3
41 - 50	<i>på</i>	8.3	8.0	6.8	5.6	3.1	6.5	3.6	3.5	6.2
	<i>i</i>	3.0	3.8	3.6	3.6	1.9	8.2	7.8	8.0	6.9
	<i>på - i</i>	5.4	4.2	3.2	2.0	1.2	-1.7	-4.2	-4.5	-0.7
51+	<i>på</i>	8.4	8.6	7.0	5.4	3.3	5.6	2.8	2.6	6.6
	<i>i</i>	2.6	3.7	3.4	2.4	2.1	7.4	8.6	8.1	7.6
	<i>på - i</i>	5.9	5.1	3.6	3.0	1.2	-1.8	-5.8	-5.5	-1.0

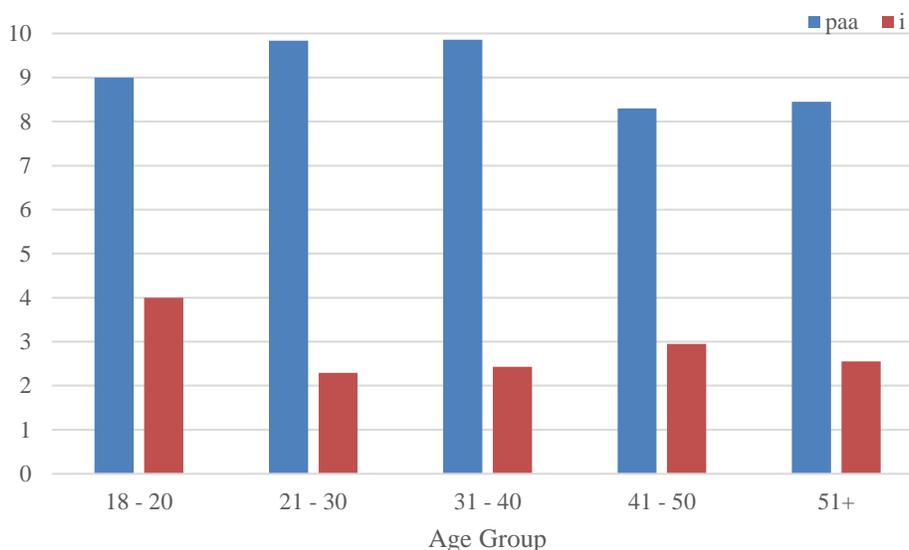
***tak* (roof)**

On average participants gave *på taket* the highest confidence rating of all the landmarks: 9.0 out of 10. In comparison, participants listed *i taket* low with a 2.6 out of 10. This firmly embeds *tak* within the CONTACT schema and establishes it as the most CONTACT compatible landmark of the stimuli.

While this trend of high ranking remains true within different age groups, age significantly effects confidence in *på* ($p = 0.0021$). Those aged 18-40 ranked *på taket* higher than those aged 40-51 years or more. *i taket*, among these age groups shows no statistical significance. The difference between *i taket* and *på taket* between those older and younger than 40 years is, however, significant. There is a larger gap between *i* and *på* for the younger generation than the older generation, signaling that the 18-40 group contrasts more heavily

between the CONTACT and CONTAINMENT schema. The older generation, in comparison, finds less of a distinction.

Figure 9: *tak* (roof) confidence value distribution by age group



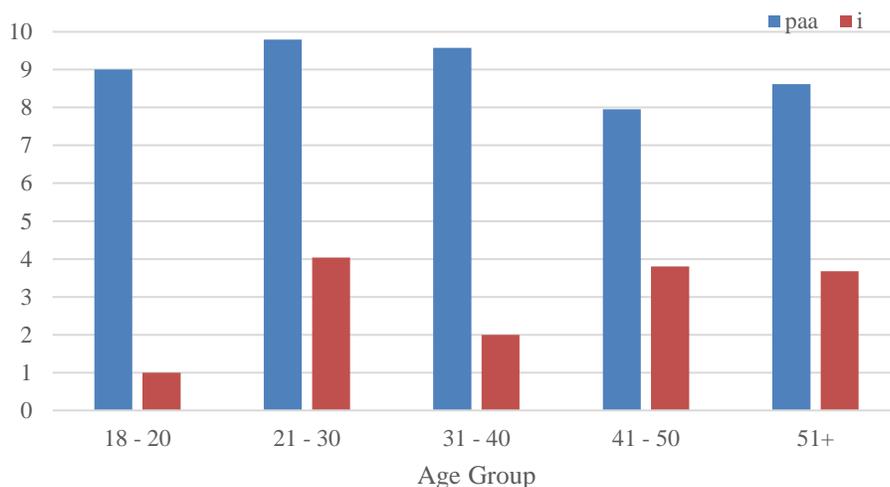
Such a distinction may lay in *tak*'s characteristics as previously defined by Dewell and in Part One of this paper. Containers are placed on a spectrum based on their shape and structure when viewed as a vehicle for ENTRY or ENCLOSURE. As the ENTRY and CONTACT schemas are only contrasted by penetration of the landmark and ENCLOSURE and CONTROL are contrasted through trajector agency, a sister spectrum may be applied. The most common human interaction with a *tak* is through CONTACT.

***sykehus* (hospital)**

The average confidence rating for *på sykehuset* is 8.9 out of 10. In contrast, *i sykehus* scored 3.6 out of 10, signifying a clear preference for *på* and the CONTACT schema. Just as with *tak*, age also significantly effects the confidence score for *på sykehuset* ($p = 0.0046$).

Although both generations rate *på* highly, the younger generation exhibits more confidence. There is also a smaller difference between *i* and *på* ratings for the older generation than the younger as seen in the chart below.

Figure 10: *sykehus* (hospital) confidence value distribution by age group

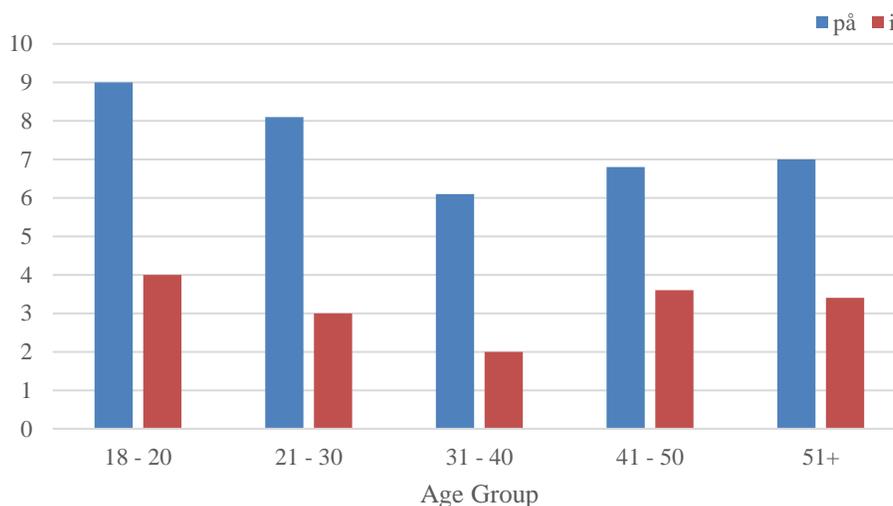


Compared to the difference in confidence rankings for 21-40 (7.5) those aged 41-50 and 51 or older are 5.3 and 5.8. The average ranking for 18-20 is not included as the sample size is too small. The older generation appears to have slightly more confidence in the use of *i sykehuset*. This suggests that they recognize hospitals as containers more than their younger counterparts. In fact, the younger age groups seem to view hospitals as more of a destination, favoring the transitory aspect of the CONTACT schema. The person arrives to meet the hospital acting as the trajectory encountering the hospital. Hospitals are not always a single building. They can be made up of several, leading to pockets of empty space between buildings that are still within its bounds. A person may cross at these points and not be within physical walls.

***Internett* (Internet)**

Participants, on average, show a clear preference for *på nettet* as opposed to *i nettet*. They rate the CONTACT based usage 7.3 out of 10 and the CONTAINMENT based usage a 3.2 out of 10. This also remains true when accounting for age. Those aged 18-30 show more confidence in the *på*-scenario than their older counterparts ($p = 0.0360$). Age also significantly effects the how each participant gages similarity between scenarios. There is a smaller difference in ranking between *i nettet* and *på nettet* for the 31-51+ group.

Figure 11: Internett confidence value distribution by age group



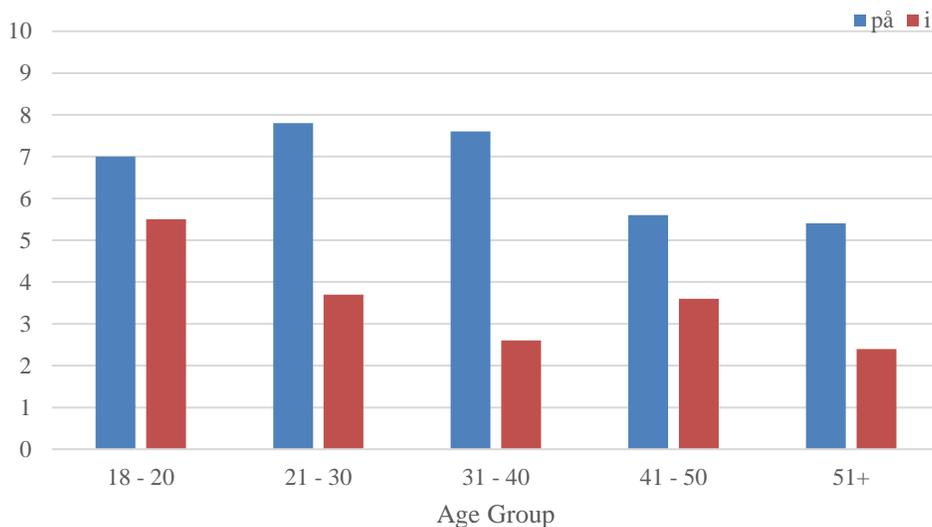
Given the relative newness of the Internet, it is not surprising that there would be a larger gap between *i nettet* and *på nettet* with the younger generation than with their elders (see Table 7). They are better acquainted with it and as such are subject to the metaphors surrounding its use. With a preference for the *på* construction, it can be inferred that younger Norwegian speakers perceive the Internet, as less of a container to hold files and videos, but more of a surface to present them on. In contrast the older generation, having not grown up in the Digital

Age is less familiar with it and would have a more abstract understanding, given that it not a very sensory object.

***vinter* (winter)**

There is less of an overt preference for *på* when compared to the previous landmarks, but participants still maintain that *på vinter* is the better option. It scored an average of 6.5 out of 10 while *i vinter* received a 3.2 of out 10. Age also maintains a significant effect on the level of confidence for *på vinter* ($p = 0.0044$). Participants aged 18-40 rate the scenario as making more sense than those aged 41-51 years or more as seen in the chart below.

Figure 12: *vinter* (winter) confidence value distribution by age group

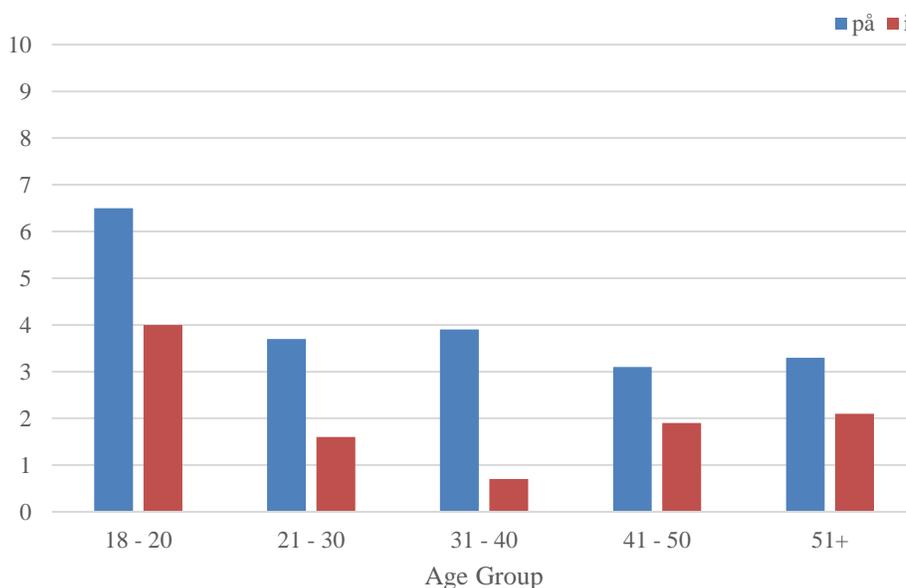


i vinter ratings between age groups are not statistically significant and no significant change appears in the rating the difference between the *i* and *på* scenarios.

***mandag* (Monday)**

There appears to be a slight preference in *på* over *i* in the *mandag* scenarios. The average rating for *på* was 3.9 out of 10 while the average rating for *i* was 1.5 out of 10. Between age groups this is also the case.

Figure 13: *mandag* (Monday) confidence value distribution by age group



Though there appears to be a large difference between 18-20 and the rest of the age groups, the sample size is too low to claim statistical significance. With both scenarios receiving low confidence scores, it calls into question the relevance of the CONTACT and CONTAINMENT schemas and scenario construction. Participants were presented with the following scenario:

Nils inviterte oss til huset sitt. På/I mandag har vi planer nå.

Nils invited us to his house. On/In Monday we have plans now.

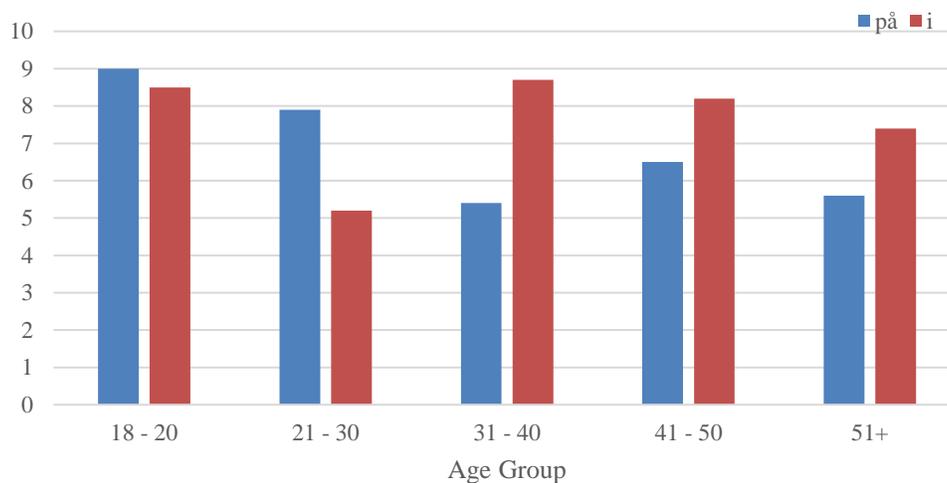
Although Standard Norwegian dictates that *på mandag* is grammatical and *på mandag* is a high frequency phrase in the noTenTen2017 Bokmaal Corpus, participants may have felt that the

scenario would be better without a preposition. The proper noun, *mandag* might have been sufficient information as it is temporal in nature. Further investigation is needed.

***harddisk* (hard drive)**

Crossover among the schemas begin to appear in objects like *harddisk*. The *på* scenario scored 8 out of 10 while the *i* scenario scored 6 out of 10. The difference between *i* and *på* is extremely significant ($p = 0.0001$). While participants lean toward *på*, the *i* scenario is not improbable to them. Differences among age groups show no statistical significance, however.

Figure 14: *harddisk* (hard drive) confidence value distribution by age group



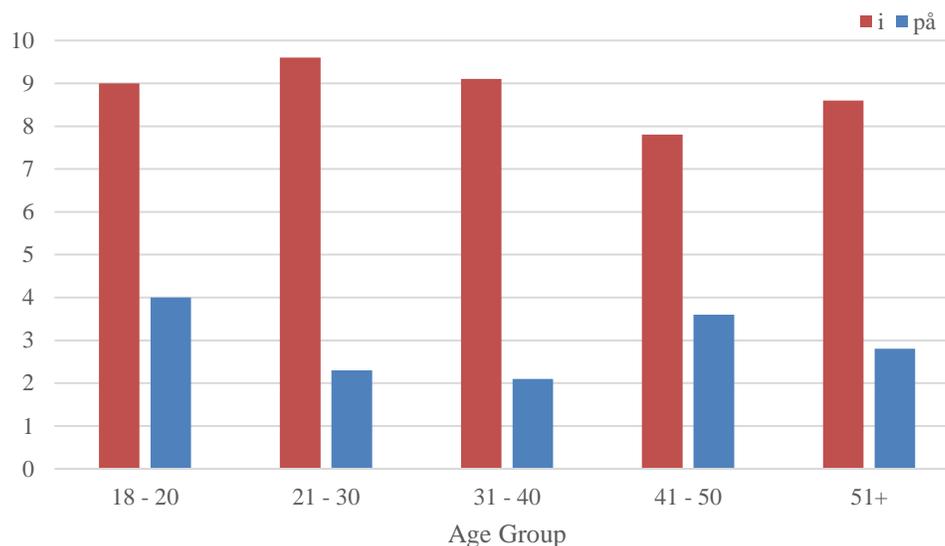
The closeness between ratings may be attributed to the characteristics of the landmark. Common scenarios from the corpus results depict loading and offloading data and reference to files stored within the *harddisk*. Though they are a relatively recent innovation they are tangible thus allowing all generations to physically interact with them. These interactions would include the loading and offloading of data experienced by the users themselves through the action of dragging files to and from the hard disk icon on screen. What the users are experiencing is the

ENTRY schema with they themselves as the catalyst. The files are moved from one location and into another, disappearing into the new location and may be perceived as either far within the boundaries of the hard disk or coasting on the periphery. The closer the TR is to the periphery the more visually similar it is to the CONTACT schema, thus allowing for crossover and use of both prepositions.

***hage* (garden)**

On average, participants are more confident in the *i* scenario than *på*, rating them 8.8 out of 10 and 2.8 out of 10, respectively. This also shows that CONTAINMENT supersedes CONTACT for Norwegian speakers. *Hage* had the highest rated *i* scenario, setting it up as the landmark to exhibit characteristics most suitable for ENTRY and ENCLOSURE. Age also has a significant effect on *i*'s rating ($p = 0.0068$). The older generation (41-51+) rated the *i* scenario lower than the younger generation (18-40), showcasing a dip in confidence with age. The difference between *på* and *i* ratings for the older generation is significant as well. For the older generation there is less of a difference in whether one preposition made sense over the other.

Figure 15: *hage* (garden) confidence value distribution by age group



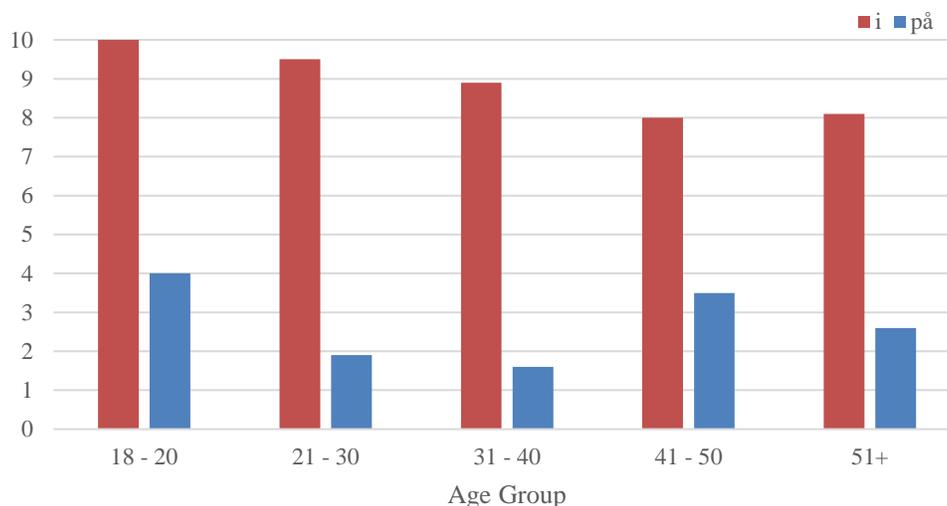
In the older generations, though there is a strong preference for one preposition over the other. The smaller gap between confidence levels could suggest that some participants recognize that path one would have to take to enter the garden. Upon entry one would encounter the outer edge of the garden (ie. the boundary), briefly evoking the CONTACT schema as it transformed into the ENTRY schema upon penetration.

***bil* (car)**

The *i* scenario scored the second most confident score for the CONTAINMENT schema: 8.6 out of 10. In contrast, the *på* scenario received a low confidence score: 2.6 out of 10, suggesting that Norwegian speakers very rarely access the CONTACT schema for *bil*. This supports the corpus results where *i bil* appeared more frequently than *på bil*. *På bil* when the trajector is a person appears in very specific situations where one interacts directly with the car's external boundaries. Participants do not appear to have accessed such situations. Age also significantly effects confidence scores for *i* ($p = 0.0125$). Though all age groups rank *i bil* highly,

there is a downward trend in confidence levels. The older generation (41-51+) rate *i* lower than the younger generation (18-40).

Figure 16: *bil* (car) confidence value distribution by age group



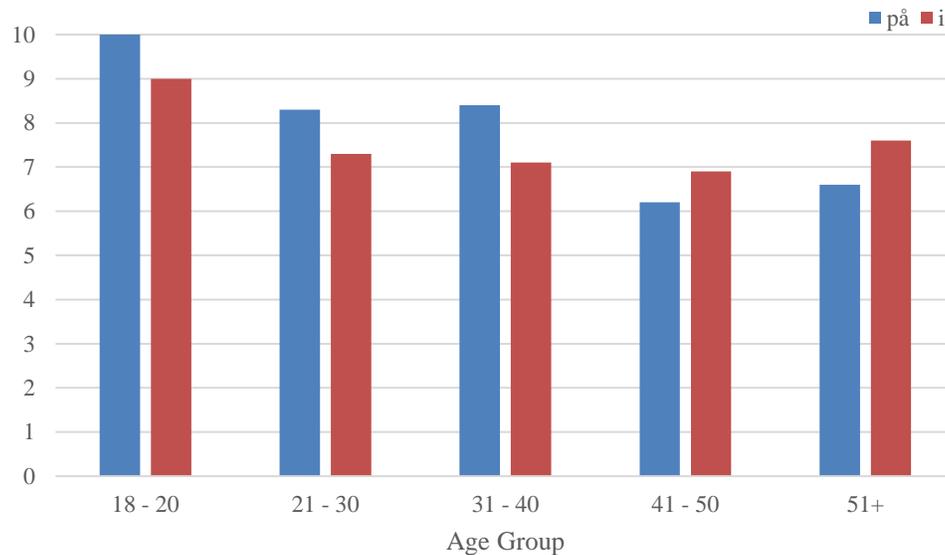
This downward trend in confidence levels might be attributed to participants overthinking the exercise. It could also suggest a similar scenario to *på hage* where the older generation appeared to have entertained the concept of encountering landmarks before entering them. Before climbing into a car, a person must first get the car. This experience is embodied in the image schema transformation from CONTACT and ENTRY where the trajectory meets the landmark boundary (represented in this scenario as the space at the feet of the car) before continuing through.

***båt* (boat)**

On average, confidence values for both scenarios are extremely close. The *i*-scenario scored an average of 7.4 while the *på*-scenario scored a 7.3 out 10. This shows a slight preference for the CONTAINMENT schema with a difference of 0.1. However, between age

groups the younger generation appears to favor the CONTACT schema ($p = 0.0082$). The *på*-scenario's average rating for those aged 18 - 40 years was 8.3 out of 10 while those aged 41 years or more rated it 6.2 - 6.6 out of 10.

Figure 17: *båt* (boat) confidence value distribution by age group



The extreme closeness in ratings across the generations suggests that there is much room for crossover. Though it is surprising that while boats are semantically related to water, their physical characteristics are more rigid. This would lead one to believe that crossover between image schemas would not be viable. However, it may relate to the vast number of scenarios possible. Boats come in all shapes and sizes and while some shapes may be culturally significant, the Norwegian concept of a boat may have either a cabin or not. Therefore presenting an option for a CONTAINMENT-forward scenario with the inclusion of a cabin or a CONTACT-forward scenario where the boat has low sides and the most interaction is done with the flat floor.

Discussion

There appears to be a correlation between abstract objects and preposition interchangeability. The gap between *i* and *på* confidence values for abstract objects is smaller than for concrete objects. *I* and *på* though associated with different image schema fall under the same semantic grouping of spatial schemas. This can lead to points of crossover, where the object's characteristics allow for multiple interpretations of a scenario. Objects like *Internett*, *mandag*, and *vinter*, are considered abstract by virtue of their intangibility. When compared to tangible, concrete objects *bil* and *tak* exhibit less variability in preposition choice.

In contrast to the hypothesis, *båt*, a tangible and concrete object received near equivalent confidence values for both *i* and *på*. The difference in confidence ratings for both prepositions was so low (0.1) that it can be safely assumed that all participants were confident that both containment-based and contact-based readings of the presented scenario were viable constructions. One reason for this exception may be rooted in the physical structure of boats. The basic construction for a boat consists of a wooden body with a cavity, effectively creating a container.

Age does not seem to play much a factor in preposition choice. In general, the younger participants appeared more confident than their elders. They rated the presented scenarios higher and as such demonstrated a higher likelihood of schematic crossover between CONTAINMENT and CONTACT schemas. This could signal a change in subsequent generations of Norwegian speakers: where younger generations allow for higher rates of switching between prepositions if

they pull from the same semantic domain. This, however, would require further research and experimentation. Regional dialects do not appear to factor into preposition choice.

Conclusion

While CONTAINMENT can be used as a hierarchical schema for *i* it can be divided into the ENTRY and ENCLOSURE schemas. The realization of each schema is governed by the nature of the landmark. The more structured and rigid a landmark is the more likely the ENTRY schema is invoked. The most prominent structured landmarks are buildings and geographic features. In contrast, the more flexible a landmark is the more likely it would evoke the ENCLOSURE schema. The most common of these being objects en masse and institutions. This division would account for the overlap in preposition usage between *i* and på in the earlier eras of Norwegian. The CONTACT schema exhibited the least amount of change between the four eras in this study. It was clearly associated with a meeting of boundaries, regardless of the trajector or the landmark's shape. It was seen with both lateral and horizontal orientations and flat and round landmarks. Schema crossover between ENTRY and CONTACT as evidenced in the use of either *i* or *á* exists where bounded spaces, perceived as flat planes, experience a penetrating trajector. This is most apparent in temporal landmarks from all four eras, utilizing the TIME MOVES ALONG A BOUNDED PATH metaphor. Crossover also appears in conjunction with the PART-WHOLE schema where the PART is a trajector and the WHOLE is a landmark.

Yet even with the stable history of ENTRY, ENCLOSURE and CONTACT there were some changes. With the standardization of Norwegian in the Modern period, there is a marked push toward clearly separating the CONTAINMENT schemas and CONTACT between *i* and på. Though the Language Council of Norway's detailed list of rules for *i* and på usage derives from

historic uses, the very nature of a set of rules restricts a person's perception. Native speakers and learners alike will learn to adhere to these rules and apply them in new scenarios.

Crossover as witnessed through prepositional interchangeability appears to persist among native speakers in modern discourse. Results from the survey on whether *i* and *på* could be used interchangeably in ambiguous contexts reiterates that abstract objects and objects with prominent flat surfaces and cavities may more easily take either preposition without changing the meaning of the sentence. Confidence values for each preposition in these instances were both higher and closer together for the younger generation, signaling a possible disregard for the rules and a shift back toward schematic crossover.

The findings in this paper explore the structure of CONTAINMENT and CONTACT in Norwegian diachronically. It presents an explanation for the overlapping senses of *i* and *på* in previous eras as well as a look into their current and future uses. However, both studies were not without their limitations. Future investigations would benefit from wider datasets in Old Norse, Old Norwegian, and Middle Norwegian. Data from the first half of this study was limited by the extent of linguistic knowledge of the older eras. Though this was supplemented with relevant grammars, when necessary, some periods did not have this available, Middle Norwegian in particular. The survey in the second half was limited by the examples selected. Subsequent versions would benefit from a more variety in landmark types with closer attention to usage frequency either from a corpus or discourse.

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Appendix A: Text Sources

Old Norse

On the Settling of Iceland (OSI)

Prose Edda (PE)

The Battle of Stamford Bridge (BSB)

Grettis saga (GS)

Njáls saga (NS)

Egíls saga (ES)

The Tale of Þóðvarr Bjarki (BB)

The Waking of Angantýr (WA)

Völuspá (V)

Hávamál (H)

Old Norwegian

Olafs saga in helga (OS)

Konungs skuggsjá (KS)

Homiliebok (HB)

Barlåms ok Josaphats saga (BJS)

Thómass saga erkibiskups (TS)

Gammelnorske runedikt (RD)

Middle Norwegian

Om Norgis Rige

Diplomatarium Norvegicum (volumes I-XXI)

1 Juni 1300, Also

22 Juni 1300, Öykerö

19 Mai 1307, Thingvold p.Hetland

23 Mai 1315, Bergen

18 Oktbr. 1323 Tunsberg

9 Juni 1326, Vossevangen

16 Decbr. 1328, Aslo

22 Oktbr. 1341, Bergen

26 Mai 1339, Hæreland

3 Juni? 1351, Voss

Vol. 21 Dipl. 326 [8. september 1430-24. september 1431.] (Uten. Sted)

Appendix B: Survey Questions in Norwegian



SAN FRANCISCO
STATE UNIVERSITY

Norsk ▼

Vennligst evaluer på en skala fra 0-10 den understrekede setningen basert på hvor mye den gir mening for deg.

Lukas trenger å finne informasjon til sjefen sin. De filene er i harddisken.

Ingen	0	1	2	3	4	5	6	7	8	9	Perfekt 10
	<input type="radio"/>										

0%

0%
100%

100%

→



SAN FRANCISCO
STATE UNIVERSITY

Norsk ▼

Vennligst evaluer på en skala fra 0-10 den understrekede setningen basert på hvor mye den gir mening for deg.

Lukas trenger å finne informasjon til sjefen sin. De filene er på harddisken.

Ingen	0	1	2	3	4	5	6	7	8	9	Perfekt 10
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SAN FRANCISCO STATE UNIVERSITY

Norsk ▾

Vennligst evaluer på en skala fra 0-10 den understrekede setningen basert på hvor mye den gir mening for deg.

Hvalsafarituren drar snart. Vi er på båten nå.

Ingen	0	1	2	3	4	5	6	7	8	9	Perfekt 10
	<input type="radio"/>										

0%  100%

SAN FRANCISCO STATE UNIVERSITY

Norsk ▾

Vennligst evaluer på en skala fra 0-10 den understrekede setningen basert på hvor mye den gir mening for deg.

Hvalsafarituren drar snart. Vi er i båten nå.

Ingen	0	1	2	3	4	5	6	7	8	9	Perfekt 10
	<input type="radio"/>										

0%  100%



SAN FRANCISCO STATE UNIVERSITY

Norsk ▾

Vennligst evaluer på en skala fra 0-10 den understrekede setningen basert på hvor mye den gir mening for deg.

Skorsteinspipen vår er tett. Feieren er på taket nå.

Ingen

0



1



2



3



4



5



6



7



8



9



Perfekt

10

0%  100%

SAN FRANCISCO STATE UNIVERSITY

Norsk ▾

Vennligst evaluer på en skala fra 0-10 den understrekede setningen basert på hvor mye den gir mening for deg.

Skorsteinspipen vår er tett. Feieren er i taket nå.

Ingen

0



1



2



3



4



5



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7



8



9



Perfekt

10

0%  100%



SAN FRANCISCO STATE UNIVERSITY

Norsk

Vennligst evaluer på en skala fra 0-10 den understrekede setningen basert på hvor mye den gir mening for deg.

Nils inviterte oss til huset sitt. På mandag har vi planer nå.

Ingen

0



1



2



3



4



5



6



7



8



9



Perfekt

10



0% 100%



SAN FRANCISCO STATE UNIVERSITY

Norsk

Vennligst evaluer på en skala fra 0-10 den understrekede setningen basert på hvor mye den gir mening for deg.

Nils inviterte oss til huset sitt. I mandag har vi planer nå.

Ingen

0



1



2



3



4



5



6



7



8



9



Perfekt

10



0% 100%





SAN FRANCISCO STATE UNIVERSITY

Norsk ▾

Vennligst evaluer på en skala fra 0-10 den understrekede setningen basert på hvor mye den gir mening for deg.

Inez vil dra til Norge. På vinteren snør det.

Ingen 0 1 2 3 4 5 6 7 8 9 Perfekt 10

0% 100%



SAN FRANCISCO STATE UNIVERSITY

Norsk ▾

Vennligst evaluer på en skala fra 0-10 den understrekede setningen basert på hvor mye den gir mening for deg.

Inez vil dra til Norge. I vinteren snør det.

Ingen 0 1 2 3 4 5 6 7 8 9 Perfekt 10

0% 100%





SAN FRANCISCO STATE UNIVERSITY

Norsk ▾

Vennligst evaluer på en skala fra 0-10 den understrekede setningen basert på hvor mye den gir mening for deg.

Vi filmet overraskelsesbursdagen til Tine. Den er på internettet nå.

Ingen 0 1 2 3 4 5 6 7 8 9 Perfekt 10

0% 100%



SAN FRANCISCO STATE UNIVERSITY

Norsk ▾

Vennligst evaluer på en skala fra 0-10 den understrekede setningen basert på hvor mye den gir mening for deg.

Vi filmet overraskelsesbursdagen til Tine. Den er i internettet nå.

Ingen 0 1 2 3 4 5 6 7 8 9 Perfekt 10

0% 100%





SAN FRANCISCO
STATE UNIVERSITY

Norsk ▾

Vennligst evaluer på en skala fra 0-10 den understrekede setningen basert på hvor mye den gir mening for deg.

Maria skal få gipsen fjernet. Hun er på sykehuset nå.

Ingen 0 1 2 3 4 5 6 7 8 9 Perfekt 10

0% 100%



SAN FRANCISCO
STATE UNIVERSITY

Norsk ▾

Vennligst evaluer på en skala fra 0-10 den understrekede setningen basert på hvor mye den gir mening for deg.

Maria skal få gipsen fjernet. Hun er i sykehuset nå.

Ingen 0 1 2 3 4 5 6 7 8 9 Perfekt 10

0% 100%





SAN FRANCISCO
STATE UNIVERSITY

Norsk ▾

Vennligst evaluer på en skala fra 0-10 den understrekede setningen basert på hvor mye den gir mening for deg.

Joachim skal besøke familien sin i Eidfjord. Han er på bilen nå.

Ingen 0 1 2 3 4 5 6 7 8 9 Perfekt 10

0% 100%



SAN FRANCISCO
STATE UNIVERSITY

Norsk ▾

Vennligst evaluer på en skala fra 0-10 den understrekede setningen basert på hvor mye den gir mening for deg.

Joachim skal besøke familien sin i Eidfjord. Han er i bilen nå.

Ingen 0 1 2 3 4 5 6 7 8 9 Perfekt 10

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SAN FRANCISCO STATE UNIVERSITY

Norsk ▾

Vennligst evaluer på en skala fra 0-10 den understrekede setningen basert på hvor mye den gir mening for deg.

Barna trengte en pause. De er på hagen.

Ingen 0 1 2 3 4 5 6 7 8 9 Perfekt 10

0% 100%



SAN FRANCISCO STATE UNIVERSITY

Norsk ▾

Vennligst evaluer på en skala fra 0-10 den understrekede setningen basert på hvor mye den gir mening for deg.

Barna trengte en pause. De er i hagen.

Ingen 0 1 2 3 4 5 6 7 8 9 Perfekt 10

0% 100%





SAN FRANCISCO
STATE UNIVERSITY

Norsk ▼

Kjønn

- Mann
- Kvinne
- Foretrekker å ikke svare

Hvor gammel er du?

- 18 - 20
- 21 - 30
- 31 - 40
- 41 - 50
- 51+

Hvilken kommune er du fra?

Er norsk morsmålet ditt?

- Ja
- Nei

0%  100%

