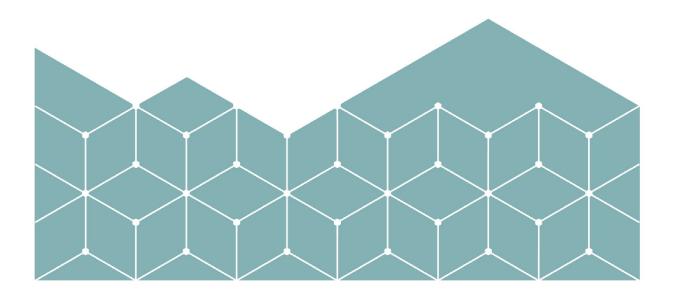Project Sci-fi:

Inviting aliens and robots into the English classroom, how fictional cultures can promote development of intercultural competence

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Abstract

Little focus has been placed on why English teachers in Norway should favour intercultural competence over cultural facts. Yet knowing cultural facts do not make pupils effective communicators, which is the purpose for language learning. Intercultural competence prepares pupils for intercultural encounters, through a conglomeration of open attitudes, accurate knowledge, insightful understanding, appropriate skills, and practical application. Literature is a common and efficient means of exploring culture and intercultural encounters within a classroom setting. Both multicultural literature and science fiction explore cultural themes and identity, but the latter explores a broader range of contemporary topics. Therefore, this thesis sought to explore to what extent science fiction could be used to promote intercultural competence in the English classroom. Analysing fiction and imaginary cultures circumvented pitfalls common to multicultural literature. Aliens and robots could offer pupils a safe place to explore culture and nurture their intercultural competence. As follows, intercultural encounters within two carefully selected science fiction texts were extensively analysed. The ample data collected was encouraging, the analysed results were significant. *Star Trek* (Abrams, 2009) contained a multicultural cast, in-depth immersion into Vulcan culture, and explored biracialism and cultural duality. *I, robot* (Proyas, 2004) depicted characters from marginalised groups, challenged and deconstructed stereotypes, and explored prejudice through the perspectives of both the racist, and the victim of prejudice. By observing the human Kirk and half-Vulcan Spock, pupils could experience how culture affected perspectives and behaviour, gain awareness of cultural cues, and expand their intercultural competence for future intercultural encounters. By observing the robot Sonny and the human Spooner, pupils could gain awareness of attitudes, their wide spanning effect upon individuals and the environment, becoming more strategic in what attitudes and behaviours to present during intercultural encounters.

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1 Introduction

1.1 Background

Globalisation has ensured that people from different nations, cultures, sub-cultures, and socio-political backgrounds encounter and interact with each other (see Byram, 1997, p. 1; Chao, 2013, p. 4). Such communicative exchanges, known as intercultural encounters, make it necessary to develop the ability to exchange meaning with people of alternate perspectives. The desire to communicate across cultural boundaries is a common reason for choosing to learn a new language.

Intercultural competence concerns the ability to function in a world of culturally diverse societies (Barrett, Byram, Lázár, Mompoint-Gaillard, & Philippou, 2014, pp. 9-10). As one might deduce, this ability is important to modern day societies and relevant to the communicative focus of current language teaching (see Barrett et al., 2014, p. 9; Dypedahl, 2007, p. 4; Risager, 2000, p. 14). Therefore, both internationally and locally, governments and educators advocate inclusion of intercultural competence in modern language teaching curricula (see Council of Europe, 2001, p. 1; The Norwegian Directorate for Education and Training, 2013, p. 1, 2019, p. 1).

However, little has been published about how and why English Second Language (ESL) teachers in Norway should teach intercultural competence rather than cultural facts to their pupils (Lund, 2008, pp. 4-5). The current national ESL curriculum only vaguely alludes to it in its descriptive aims (The Norwegian Directorate for Education and Training, 2013, pp. 5-9), which emulate the Common European Framework's (CEFR) guidelines and reference levels (Council of Europe, 2001, pp. 23-29), without clarifying precisely what intercultural competence is or why it is needed. The current draft of the future national ESL curriculum (see The Norwegian Directorate for Education and Training, 2019, p. 1), glosses over this issue by reducing the curriculum aims, further distancing it from its predecessors resemblance to the CEFR. The draft's one tentative allusion to intercultural competence is an aim, repeated for each year-segment of the curriculum, proposing that pupils should develop learning- and communicative-strategies. A possible consequence, of not understanding the intention behind the curriculum aims or knowing about intercultural competence, is that teachers might ignore, misconstrue or struggle with how and what to teach to Norwegian pupils (Lund, 2008, pp. 1, 5-6).

1.2 Research aim and structure of dissertation

The aim of this dissertation is to explore the concept of intercultural competence and to investigate to what extent the science fiction genre has the potential to develop Norwegian ESL pupils' intercultural competence. My research questions are therefore as follows:

1. To what extent may the Science Fiction genre be used to promote intercultural competence in the ESL classroom?
2. What are possible benefits of using Science Fiction texts during the starting-phase of intercultural learning?

The structure of this thesis is as follows: Chapter two will present the theoretical framework of the thesis, whilst chapters three and four will present the selection and analysis of the material. Chapter five will discuss how the results of the analysis are relevant to the ESL classroom, and chapter 6 will summarise the conclusion.

2 Theoretical Framework

2.1 Intercultural competence

Nobody is born with intercultural competence, it is a socialisation process that must be taught and then continuously honed (Barrett et al., 2014, p. 10; Risager, 2000, p. 14). However, both Lund and Risager claim that intercultural competence, as a term, can seem too murky and all-encompassing (Lund, 2008, p. 2; Risager, 2000, p. 14). This ambiguity can make teaching it difficult for teachers unfamiliar with intercultural competence. In what follows I will present the definition of intercultural competence on which this thesis is based.

2.1.1 Defining intercultural competence and its components

The intent behind developing intercultural competence is to enable a person to handle intercultural encounters, both during personal daily-life encounters (small-scale) and international or institutional encounters (larger-scale), in a contextually appropriate and respectful manner (Risager, 2000, p. 15). However, no single ability would be sufficient to successfully traverse such encounters. Navigating an intercultural encounter successfully requires anticipating what potential differences and similarities between the interlocutors might affect the communicative exchange and adjust accordingly. Anticipating the situational context of an encounter requires general cultural knowledge and insight into one's own and others' perspectives. Obtaining cultural information and understanding interlocutors' cultural perspectives require skills of acquisition, interpretation, empathy and objective introspection.

Instead of a single ability, intercultural competence is defined as a blend of "attitudes, knowledge, understanding and skills applied through actions" (Barrett et al., 2014, p. 16) that together enable a person to adeptly handle intercultural encounters.

Byram originally suggested dividing intercultural competence into five separate components which he named the five savoirs (see Byram, 1997; Council of Europe, 2001). However, as Byram and fellow researchers' understanding of intercultural competence evolved, so too did their perception of the separate components. The components used in respect of this thesis are re-envisioned versions of the five components that where formulated by Byram together with Barret, Lázár, Mompoint-Gaillard and Philippou (Barrett et al., 2014, p. 19); these are as follows:

- The *attitude* component represents the mindset or perspective, which entails being open to and appreciative of cultural diversity (Barrett et al., 2014, p. 19). An open attitude is demonstrated through being willing to seek out intercultural encounters, the desire to obtain new or verify old information, the flexibility to challenge, adapt or amend information, and generally expressing acceptance, respect, empathy, and/or tolerance of other cultures or perspectives.

- The *knowledge* component represents the theoretical information, which entails having accurate cultural information (Barrett et al., 2014, pp. 19-20). Having accurate cultural knowledge is demonstrated by knowing and being able to divulge factual information about a culture and/or subculture. Information can consist of the history, beliefs, practices, language, institutions, products, and/or other topics relevant to the culture.

- The *understanding* component represents the metacognitive contemplation, which entails processing the meaning and possible implications of cultural information (Barrett et al., 2014, pp. 19-20). Processing cultural information is demonstrated through contemplating, interpreting, assessing, and/or comparing the information, to attain further insight concerning cultural context, to perceive the differences between cultures, or to gain awareness of how language, behaviour, perspective, or other cultural context from either interlocutor might affect a communicative exchange.

- The *skills* component represent the technical abilities, which entails having various appropriate skills needed to achieve an open attitude, obtain and process cultural knowledge, and adapt understanding (Barrett et al., 2014, p. 20). Having intercultural skills is demonstrated through displays of empathy and/or objective

multiperspectivity, by judging and adjusting language, behaviour, or other communicative dimensions to appropriately suit the situation, use of various information processing skills that enable acquiring, interpreting, assessing, and adapting cultural information.

- The *action* component represents the practical actualisation of the other four components, which entails leaving the safety of the theoretical premise and putting the acquired attitude, skills, knowledge and understanding to actual use (Barrett et al., 2014, p. 21). This is demonstrated through intentionally seeking out members of other cultures, actively engaging in, mediating between and cooperating with them in an appropriate and open manner, including engendering positive attitudes and defending against and/or diffusing discriminatory beliefs/behaviour exhibited by others.

Breaking intercultural competence into its more tangible component pieces makes it easier to perceive what it is and encompasses. Such deconstruction of intercultural competence also makes the many similarities between the five components and the Norwegian national ESL curriculum aims (see The Norwegian Directorate for Education and Training, 2013, pp. 5-9, 2019, p. 1) more discernible. However, it is important to note that the description of these five components are intentionally limited and not exceedingly comprehensive, as they are only intended to provide an indicative guideline as to what each component involves.

2.1.2 Expressing and categorising culture

Culture is a social construction that members are consciously and subconsciously exposed to from early childhood. Hall (1991, p. 46) describes culture as a screen used to observe and perceive outsiders and the world, influencing what an individual absorbs and chooses to ignore. It accounts for a significant amount of a person's identity and learned behaviour, their cultural identity or ethnicity.

Expressions of culture can be sorted into one of three categories: material culture, social culture, or subjective culture. Material culture, encompassing all the signature cultural objects such as fashion, tools and cuisine (i.e. the physical artefacts), and social culture, encompassing the common conventions of a culture such as language, lore and behaviour (i.e. the social institutions), are the most easily discernible physical practices of a culture (Barrett et al., 2014, pp. 13-14; Hofstede, Hofstede, & Minkov, 2010, pp. 7-9). Subjective culture, which impact how members of a culture perceive the world, encompasses the less apparent

fundamental aspects such as attitudes, morals, and values (i.e. cultural psyche) (Barrett et al., 2014, p. 14; Hofstede et al., 2010, p. 9).

Culture, both regional (e.g. national culture) and non-regional (e.g. generational culture, religious culture), is embedded throughout the world and within societies. Understanding how influential culture can be, how aspects of it can affect a communicative exchange, is important to both language learning and development of intercultural competence.

2.1.3 Conveying meaning and the communicative dimensions

We have previously established that communication is the purpose for learning a language and that mastering only the linguistic form is not sufficient. Spoken and written language are not the only mediums that affect meaning (Hall, 1991, p. 47). An alteration in vocal tones and/or facial expressions can drastically change the meaning of an utterance. Wearing an outfit or uniform could, without words, provide an indicator of a person's nationality, profession, or socio-economic status. In addition, these non-language cues can have different connotations depending upon cultural subtext, thereby altering the intended message or causing communicative breakdowns.

Both Poyatas (qtd. in Byram, 1997) and Samovar, Porter, McDaniel and Roy (2013) identify several communicative dimensions, many of them identical or similar. These dimensions are important to keep in mind whilst participating in, observing or analysing intercultural encounters, as developing intercultural competence includes knowing of and understanding how various communicative dimensions can convey cultural information or affect communicative exchanges. A more comprehensive list of communicative dimensions can be found in Appendix A, but the various communicative dimensions can be sorted into these main categories (Poyatas qtd. in Byram, 1997, pp. 13-14; Samovar et al., 2013, pp. 262-284):

- o *Language*, the linguistic aspect that concerns both the physical shaping and pronunciation a foreign language to correctly enunciate it, and the acquiring and expanding a linguistic database of words and grammatical rules.
- o *Paralanguage*, the modifiers for verbal communication or vocalised non-verbal sounds that can indicate personal background, status, emotional state, modify or imply sub-textual meanings.
- o *Kinesics*, the forms of body movement that function as or accentuate verbal communication, or can provide interpretive indicators of emotional states, relationships, or status.

- o ***Proxemics***, the power and/or relationship indicators that are expressed through the physical environment, such as architectural design and function, and/or spatial distance.
- o ***Body- or object-adaptors***, which serve as personal body modifiers that accentuate or signify social groups, emotional states, personal or social status.

Not all communicative dimensions will factor into a communicative exchange every time, only a selection of them. However, having a better understanding of how many communicative dimensions exist and might contribute to conveying meaning during a communicative exchange, would regardless benefit pupils as such awareness may lead to improved observational and communicative skills.

2.2 Literature

Literature is considered an important part of culture, and culture is reflected in literature. This is why working with literature is an inherent part of the current national ESL curriculum (The Norwegian Directorate for Education and Training, 2013, p. 3). Being exposed to literature from other cultures is a form of intercultural encounter which does not necessitate leaving the classroom, thus enabling pupils to further develop their intercultural competence without having to travel abroad.

2.2.1 Multicultural literature

Whilst there exists a large variety of literature, multicultural literature is perhaps one of the more apparent literature categories to use when intending to facilitate the development of intercultural competence within an ESL classroom. It is defined as literature "about and/or by historically underrepresented groups, whose faces and stories and histories are missing from much of our literature" (Mitchel, 2003, p. 200). This category basically refers to texts that give voice to women, disabled people, people of colour or other ethnicities, religious communities, and/or other minorities that have been historically repressed, ignored, or otherwise marginalized.

Insight into the struggles of marginalized and undermined or excluded groups can facilitate positive changes to the current society's power structure by educating pupils about cultural differences and removing prejudice, which can contribute towards increased social equality (Cai qtd. in Bista, 2012, p. 317). The purpose of multicultural literature is to raise awareness of and/or offer an insider's perspective into these groups, portrayed through intercultural encounters between characters within the text and as intercultural encounters between the text

and the audience. This type of cultural exposure can facilitate further development of ESL pupils' (inter)cultural knowledge and understanding. Using multicultural literature in the ESL classroom offers a simple yet pragmatic means of providing insight into alternate cultural/sociological perspectives that could serve to facilitate and expand upon pupils' developing intercultural competence. This is compatible with several current curriculum objectives (see The Norwegian Directorate for Education and Training, 2013, pp. 1-2), which concern exposing pupils to (multi)cultural literature for the purpose of developing their cultural (and intercultural) attitudes, knowledge and understanding.

2.2.2 The science fiction genre

Using multicultural literature is an obvious route for expanding pupils' real-world cultural knowledge and developing other aspects of their intercultural competence. However, it is not the only possible literature category suitable for this. Another suitable genre is science fiction, which is what this thesis is founded upon.

What defines a text as belonging to the science fiction genre is that it features fantastic, and thus non-realistic, elements that differ from the world as we know it (Harris-Fain, 2005, pp. 4-5). More precisely, what separates science fiction from fantasy is that the source of this element must appear plausibly probable to the audience, whether through rationality or one of the sciences (Harris-Fain, 2005, pp. 4-5). These world-changing items, forces or developments, referred to as the *novum,* are the catalysts that cause the divergence between the fictional setting and our real world. The setting's societies and corresponding cultures are shaped by how the author believes the novum's presence would impact the inhabitants' lives, and what implications its presence would have upon the present/future societal developments (Csicsery-Ronay Jr., 2011, pp. 10-11). It is a genre that is purposefully intended to evoke "cognitive estrangement" in an audience (Darko Suvin qtd. in Harris-Fain, 2005, p. 5).

Similar to multicultural literature, the science fiction genre is a popular "framework for examining sexuality, race, and other real-world issues" (Obeso, 2014, pp. 25-26). By using fictional cultures and premises, an author can explore and critique topics relevant to identity, ethnicity and cultural diversity, in addition to challenge real-world societal and cultural boundaries, more subtly and/or tactfully than might be otherwise possible. This obscuration through use of fictional cultures and settings, enables authors to circumnavigate the audiences' possible preconceptions linked to real-life cultures (Lim et al., 2011, p. 224), allowing everyone to experience the fictional culture(s) from a point of neutrality. This

reasoning also negates the question of authenticity and breaking societal taboos, such as accusations of cultural misrepresentation and prejudice discrimination, which is a difficult field to navigate within multicultural literature and cultural debates. Within an intercultural ESL classroom, analysing fictional cultures can shield pupils from the fear of appearing politically incorrect, and encourage them to more actively reflect upon and participate in debates concerning the worldly issues portrayed within the science fiction text.

2.2.3 Substituting multicultural literature with science fiction

On the one hand, multicultural literature is perceived as concerning non-fictional cultures, intended to raise awareness of real-world marginalised groups. On the other hand, science fiction's most common features are the fictional extra-terrestrial lifeforms, artificial intelligences, and/or a diversity of futuristic humans (Csicsery-Ronay Jr., 2011, pp. 168-169, 173-179). The two literature types could be perceived as contrasts or completely unrelated to one another. However, some science fiction texts can substitute as, or genuinely qualify as, multicultural literature. Science fiction authors often draw inspiration from or outright base their fictional cultural groups upon pre-existing cultures, presenting the fictional cultures as subtle (or unsubtle) allegories, similes or mirrors of their real-world counterparts (Csicsery-Ronay Jr., 2011, p. 169). In an intercultural ESL classroom, this connection to real-world cultures might provide opportunities to research the cultures to debate and otherwise explore the fictional versus real-world cultural variants' differences and similarities, facilitating the expansion of pupils' intercultural knowledge, understanding, skills, and potentially their attitudes towards the real-life cultures.

3 The selection of materials

The quantity of existing science fiction texts is massive. A science fiction text intended for use in the ESL classroom should be appropriate and relevant "substitute" material for it to adequately supplant multicultural literature for teaching/developing pupils' intercultural competence. However, selecting relevant and appropriate texts might be difficult without any guidelines.

3.1 Multicultural literature criteria

To use a text that does not out-right belong within multicultural literature, one must first discern what distinguishes multicultural literature from other types of literature and seek out science fiction texts that share similar identifiers, and, secondly, evaluate the texts' suitability for use in the ESL classroom.

3.1.1 Multicultural literature thematic types

As established in the theoretical framework, multicultural literature concerns the diversity of people, focusing upon marginalised groups. Texts belonging within multicultural literature approach cultural diversity and cultural themes differently from text to text. However, certain commonalities for how texts approach or portray the topic exist. These different approaches can be sorted into four different thematic types:

- The ***consciously interracial*** thematic type texts typically portray settings with characters/groups with rich and diverse cultural, sociological and/or racial backgrounds, particularly how they interact and coexist with one another (Bishops qtd in Mitchel, 2003, pp. 204-205).
- The ***people-are-people*** thematic type texts generally present characters as fairly homogeneous through having universally shared desires and values, focusing upon the commonalities shared with the "mainstream" characters/audience whilst glossing over cultural differences (Bishops qtd in Mitchel, 2003, p. 205).
- The ***targeted immersion (in a specific minority group)*** thematic type texts usually submerse into specific marginalised groups, using a native member to provide an alternate perspective/narrative, who acts as a guide and interpreter to their respective culture (Bishops qtd in Mitchel, 2003, pp. 205, 208).
- The ***coping with prejudice (and/or racism)*** thematic type texts typically display the negative experiences which members from marginalised groups might encounter, discriminatory incidents and other communicative encounters of a prejudiced and intolerant nature (Bishops qtd in Mitchel, 2003, p. 208).

Any text intended to be used in place of multicultural literature needs to include themes or settings that could be considered to fit into at least one of these thematic types.

Within the science fiction genre, finding texts that may fit into the multicultural literature thematic types is no great difficulty. One of the main traits of science fiction, as previously established, is the bountiful presence of extra-terrestrials, robots, or modified or futuristic humans and their respective alien cultures.

3.1.2 Multicultural literature text quality

There exists an extensive amount of texts within both multicultural literature and science fiction, yet within both types of literature there is a difference between quality and quantity. Not all texts are suitable for the ESL classroom, in particular when intended to contribute

towards pupils' developing intercultural competence. In respect of quality control, Mitchel (2003, pp. 213-214) proposes that a language teacher should evaluate a multicultural literature text in respect of three thematic considerations before opting to introduce it to pupils:

- *Literary considerations*, the aesthetic merits that make a text enjoyable to read/view.
- *Educational considerations*, the didactic relevance of a text's content in respect of curriculum aims, pedagogical approach, and intended audience.
- *Socio-political considerations*, the accuracy and authenticity of the portrayed characters and settings within the text in respect of cultural, sociological, and political characteristics.

These considerations are equally relevant for considering the suitability of science fiction texts intended for use in the intercultural competence focused ESL classroom.

In respect of literary considerations, a suitable science fiction text should ideally feature well-developed and relatable characters, a cohesive and multicultural setting, and engaging plots and themes that might stimulate pupil-participation. In respect of educational considerations, the intention is to use the text to facilitate intercultural learning; a suitable text should portray examples of intercultural encounters relevant for the intended lesson, whether the lesson's focus is developing a specific component of intercultural competence, exploring certain kinds of communicative dimensions and how they affect a communicative exchange, or assessing and/or debating where on the spectrum of the various dimensions of cultural variability a certain alien culture falls within, and how this affects the individual/society's perception of the world. The socio-political considerations of a science fiction text is less apparent, a fictional alien culture would inarguably not be considered authentic and it would be futile to try to determine whether the fictional culture is portrayed correctly or not. Therefore, what would be of more interest is whether the fictional culture has a real-world analogue, and how similar/dissimilar the two worlds' are from one another, how coherent and authentically portrayed a character's behaviour and perception of the world are in comparison to what is known or deduced about the individual's culture, and how realistic/accurate cultural perception is shown to affect communicative exchanges, including causing communicative breakdowns.

3.2   Suitable science fiction texts

The ideal teaching material is a text that ESL teachers are not only familiar with, but a text that they themselves find enjoyable to work with. A search engine could have been used to

find suitable science fiction texts, using key words such as science fiction, extra-terrestrial lifeforms, aliens, robots, artificial intelligences (A.I.s), androids, cyborgs, futuristic humans, modified humans, and/or mutants. However, to truly assess whether a text would fit both the multicultural literature thematic types and thematic considerations, in respect of content and quality, would require reading/viewing a vast quantity of texts several times. For this thesis' purpose, only science fiction texts that the author has previously been exposed to and found enjoyable were considered.

After a periphery assessment of the various science fiction texts that the author is familiar with, 8 audio-visual film texts and 8 written (and audio) texts meet at least a couple of the above criteria. Each text features extra-terrestrial aliens, robots (android or cyborg), and/or modified or futuristic humans (and animals). The texts offer settings, characters and narrative plots that fit into one or more of the multicultural literature thematic types whilst also being aesthetically pleasing to observe/read and include topics and themes potentially relatable to pupils. The texts make use of various communicative dimensions as mediums to indicate or demonstrate material, social and subjective culture, depict culturally rational and realistic behaviours and perspectives during communicative exchanges, that both demonstrate the characters' intercultural competence, and provide pupils' the opportunity to expand their own intercultural competence based upon observation and analysation of the text's content. Several of the texts also portray fictional marginalised groups that are identifiable as analogues of real-world marginalised groups. The complete list of sixteen texts that were considered are listed in Appendix B.

3.3 Limitations

Whilst most of the considered science fiction texts might be suitable for intercultural learning within the ESL classroom, this thesis is limited to reviewing only two science fiction texts due to space constraints. The selected texts should ideally incorporate several multicultural literature thematic types, as this might increase the diversity of intercultural components, communicative dimensions, and dimensions of cultural variability portrayed, which are of interest in respect of educational and socio-political considerations. However, a possible flaw of this method is that if the selected texts all include a similar combination of thematic types, the type of intercultural encounters portrayed might overlap. To resolve this, the marginalised group focused upon within each text should be distinctly different: extra-terrestrial lifeforms versus artificial lifeforms.

Similarly, written (e.g. short stories), auditory (e.g. podcast), visual (posters), audio-visual (e.g. film), or other forms of texts, all have benefits and drawbacks for use in the interculturally focused ESL classroom. However, during the early stages of intercultural learning, which is the target area of this thesis, film may be the most optimal choice to start with. Films avail observers with familiar, and easily discernible, communicative dimensions to experience intercultural encounters through and therefore analyse (see Chao, 2013; Pegrum, 2008; and Sturm, 2012 about pedagogical use of film). Using film is therefore the most expedite use of the limited classroom time allotted to the English subject within Norwegian schools (see teaching hours, The Norwegian Directorate for Education and Training, 2013, p. 3). For this reason, the selection of science fiction texts has been limited to films.

4 Review of two science fiction texts

This section will firstly touch upon the considerations that contributed to a text being selected. The thesis will then describe the science fiction setting and briefly summarise the plot. This is followed by an analysis of which themes of multicultural literature each exemplifies and how. This in turn guides the selection of which film scenes will be described and later analysed in respect of communicative dimensions, intercultural components and dimensions of cultural variability. Due to space constraints, only a few scenes and intercultural encounters have been summarised. However, vital knowledge or actions that occur during other scenes will be referenced occasionally as they might impact or support the analysis in respect of interpretation.

4.1 Text 1: *Star Trek*

A popular and renowned science fiction media franchise that has continued for over half a century, famous for pioneering and pushing multiple social boundaries (Glans, 2016; Wikipedia, 2017a), the Star Trek-franchise seems an obvious choice for focusing upon in intercultural learning. Besides the franchise's portrayal of the quintessential multicultural universe, it is extremely prolific. ESL teachers would have bountiful quantities of material from this source alone, since it has spawned multiple television series, films, and books.

Star Trek (Abrams, 2009) is the latest and most modern film-reboot of the Star Trek universe. Whilst many Star Trek series and films may be appropriate to use, the newer versions generally appeal to younger viewers due to enhanced cinematic effects, modern language use, increased representation of strong characters from marginalised cultures (e.g. women, people

of colour, disabilities), and social topics of current interest (e.g. biracialism, prejudice). Because it is a reboot film, no prior knowledge of the universe should be required to understand the setting or characters; which makes it an ideal choice of text for an interculturally-focused ESL classroom.

4.1.1 Setting and brief plot outline

The Star Trek-franchise's overall setting is placed far into the future to rationalise the technological advancements that enables building warp-drive capable spaceships (primary novum), a type of high-speed space-engine. The creation of advanced spaceships, such as the legendary USS Enterprise, led to Earth being contacted by intelligent extra-terrestrial lifeforms and establishing their presence in the setting (secondary novum). These two events led to the formation of the United Federation of Planets, which functions as an interplanetary simile of the United Nations, and Starfleet, a semi-militaristic armada of peacekeepers, diplomats, scientists and explorers (Wikipedia, 2017b).

Star Trek (Abrams, 2009) is an action genre film and a semi-reboot of the original setting which departs from the original timeline from the point of the legendary Captain James Tiberius Kirk's date of birth. The timeline diverges when a mysterious advanced spaceship attacks and destroys a Starfleet spaceship; Kirk's father sacrifices himself to save the evacuating crew, including his pregnant wife. Twenty years later, the very same hostile spaceship re-emerges, destroying the planet Vulcan and Starfleet's rescue armada. The mysterious spaceship's Romulan crew seek vengeance for an event that transpired in the original timeline's future. The Romulans next target of vengeance is Earth (i.e. the Federation HQ). The inexperienced USS Enterprise crew must locate and subdue Nero, the Romulan antagonist and his time-travelling crew, to save the world. To succeed, the human Kirk and the half-Vulcan/half-human Spock must overcome their differences and learn to cooperate.

4.1.2 Multicultural thematic type analysis

This film is ideal teaching material as it fits all four thematic types of multicultural literature. The existence of Earth's rich multicultural community, including several human ethnicities and alien species, is undeniable (see nightclub and Starfleet academy scenes in Abrams, 2009, 00:19:18, 00:28:48). However, the presence of extra-terrestrials throughout the film, besides Vulcans, are primarily background characters whose only function is to support the belief that multiple alien species occupy the area. No cultural information about the various species, besides the Vulcans, is disclosed. This is also true in respect of the portrayed human

ethnicities; the Enterprise crew consists of several different ethnicities, yet neglects to differentiate between them beyond superficial cultural differences (e.g. ethnic skin tones, names, and regional accents). This infers that all characters, regardless of species or ethnicity are the same, implying a people-are-people thematic type.

However, a film has only a limited quantity of time to move along the plot, which means it must be selective in what it portrays. One significant plot is about overcoming cultural differences, as represented by Kirk and Spock. Kirk is human, as is the intended audience of the film, so more effort is expended in exploring Spock's alien culture, which signifies the targeted immersion thematic type. Vulcan culture, as portrayed throughout the film, revolves around logic and control, Vulcans strive towards rational thought and unemotional behaviour, whilst at the same time expressing disdain and condescending attitudes towards those individuals and species perceived as emotionally compromised and therefore inferior. The focus upon Spock's struggles with his dual-nature and attempts to overcome his own internalised and Vulcan society's prejudice indicates a coping with prejudice thematic type text (see Abrams, 2009, 00:15:07, 00.18.09). When considering the aliens' presence in light of this, the film may be more aptly classified as belonging to the consciously interracial thematic type.

4.1.3 Vulcan intercultural encounters

The below three scenes portray Spock's interactions with other Vulcans. Each scene displays examples of Vulcan material, social, and subjective culture, expressed through different communicative dimensions. Each scene is first summarised, followed by an analysis of noteworthy observed or deduced Vulcan culture. The actual collated data, a character guide, which briefly outlines who characters are and which scenes they are present in, and analysis tables, which collate all recorded examples of cultural expressions and intercultural competence, are located in Appendices C.1 and C.2. Whilst the tables also record observed examples of presence and/or absence of intercultural competence, for posterity's sake, this will not be commented upon in this subsection.

4.1.3.1 Scene 1A – Struggling with dual-cultures

Scene 1A (Abrams, 2009, 00:14:23-00:17:00) introduces Vulcans in their natural habitat, the planet Vulcan, and portrays Spock's adolescent struggles. The scene starts with a brief view of an orange-brown coloured desert planet with an overlaying caption reading: Vulcan. The camera zooms onto a Vulcan metropolis and its alien architecture, sand-coloured stalagmite

skyscrapers that rise from the sand, stalactite towers attached to surrounding cliffs, elevated traffic ramps, and flying transport vehicles. The view pans to a specific stalagmite tower, changing to the inside architecture: a vast dark room filled with individual learning-pods. Vulcan youths, Caucasian humanoids with pointed ears, slanted eyebrows, straight dark hair groomed into neat bowl haircuts, and wearing high-collared dark robes are seen stationed in individual learning-pods interacting with holographic blackboard walls and tutor-A.I.s. Shadowed adult Vulcans patrol above the pods. Within his pod, a preteen Spock expertly answers multiple complex queries. When a bell signals the lesson's end, the children exit their pods and Spock is hailed by three approaching Vulcan children. Spock blandly queries if the trio intend to continue their repeated and methodical attempts to incite emotion in him, which they affirm. The group proceed to first verbally assault and later physically push Spock, without incurring any emotional response from him beyond momentary widening of eyes when pushed, until they accuse his father of being a traitor due to marrying his "human whore" mother. This eventually incites an emotional reaction, Spock's face contorts as he screams in rage, lunging towards the speaker and proceeds to physically pummel him whilst the other two paralysed observe. The scene transits to Spock's father (Sarek), grey haired, clean shaven and clad in a dark tunic, approaching Spock, sporting a bruised lip, sitting alone on a bench at the end of a corridor. Spock switches his gaze frequently between the approaching Sarek and the floor, diverting his gaze completely when Sarek sits down. Sarek quietly observes Spock and sighs, to which Spock defensively explains his peers' malicious accusations against Sarek. Whilst Spock alternates between observing Sarek and the floor, Sarek explains that Vulcans are more emotional than humans, which is why Vulcans adhere to logic to control their feelings rather than be governed by them. Spock challenges Sarek's perceived desire that Spock adhere to his Vulcan heritage, when Sarek himself disregarded Vulcan mores by marrying a human. Sarek rationalises that it is his duty, as the Earth ambassador, to observe and understand human behaviour. After pausing hesitantly, he concludes that his marrying Amanda, Spock's human mother, was based upon logic. The scene ends with Sarek reinforcing that only Spock himself can choose what culture and path to follow, musing upon what his decision will be.

In Table 1A, found in Appendix C.2, the observed physical artefacts of Vulcan culture are sorted into Body/object-adapters, which encompass all biological characteristics (e.g. pointed ears) and fashion choices (e.g. dark robes) depicted by Vulcan individuals, and Proxemics, which collates the exterior physical objects such as architecture that shapes Vulcan society

(e.g. individual learning-pods). Language, behaviour, and lore, that which sums up Vulcan social institutions, are more widely dispersed across Table 1A. Language and Para-language record the distinct speech patterns and vocabulary used (e.g. polysyllabic vocabulary, emotionless tone), Kinesics and Proxemics list notable body-language and general behaviour (e.g. emotionless facial expression, inviable personal space), whilst Dialogue notes the social behaviours and subjective values that are explained orally (e.g. control through logic).

Most expressions of Vulcan culture recorded in Table 1A are readily discernible, including architecture and apparel that are reminiscent of real-life desert cultures; however, two issues are not and should be expanded upon. The first issue is that certain behaviours recorded in Table 1A would have gone unnoticed unless the film in its entirety has been viewed prior to the commencement of data collection from individual scenes. Table 1A lists touch-avoidance and distinct personal space as part of Vulcan culture, despite touching and invasion of personal space occurring during Scene 1A. However, the first touching-incident is an attempt to intentionally provoke Spock, whilst the second incident is during Spock's emotional meltdown; during both incidents the victims display shock at the instigator's physical assault. Equally noteworthy is the absence of touch during more positive communicative exchanges, the parent-child interactions between Sarek and Spock; their interactions are exclusively verbal, neither making any motion to touch or physically comfort the other, each sitting far enough apart to not accidentally touch. These observations indicate that touching and invasion of personal space may be considered a breach of Vulcan etiquette, though deducing that this attitude towards touch is cultural is more apparent retrospectively. An observer that has viewed the film in its entirety, having knowledge that Vulcans are telepaths whose telepathy activates upon skin contact (demonstrated by Spock Prime mind-melding with Kirk during their encounter, in Abrams, 2009, 01:14:42-01:17:42), is more likely to note such behaviours. It is possible that touch amongst touch-telepaths may be an immensely private and intimate gesture.

The other issue is deducing how Vulcan subjective values and Vulcan practices, recorded in Table 1A, correlate. It is disclosed by Sarek that Vulcans value control, relying upon logical order and forgoing emotional reactions to achieve self-mastery. This idealisation of control is expressed and reinforced through Vulcans' use of precise and objective language, their rigid postures and measured body language, their practical and neat appearance and apparel, their attempts to behave in a logical manner during communicative exchanges, and their efficient and pragmatic architectural designs and educational structures. Furthermore, this idealisation

of control may also be the root of the Vulcan trio's prejudiced attitudes; introducing a foreign species, perceived as unpredictably emotional, into the genepool could have unknown consequences. Hybridisation may undermine Spock's capacity for emotional repression and self-control, causing potential chaos that can threaten the foundation of Vulcan society. From this perspective, it would be understandable that Spock is viewed as undesirable and Sarek as a traitor for endangering Vulcan tenets. However, it is important to note that this is mere conjecture founded upon statements made by select individuals during one scene. Interspecies marriage, and the raising of a hybrid child, are acts considered acceptable by one adult Vulcan, and abhorrent by three Vulcan youths. It is not possible to resolve whose attitude is truly representative of the collective Vulcan society, and who is an anomaly at this stage.

4.1.3.2   Scene 2A – Fluctuating between dual-cultures

Scene 2A (Abrams, 2009, 00:17:00-00:19:20) takes place at the Vulcan Science Academy (VSA) when Spock has reached adulthood and is about to choose his path. Standing by a balcony-corridor with massive windows, Spock's human mother, Amanda, reaches out for him whilst calling his name. Amanda attempts to soothe Spock's anxiousness by caressing his face, tidying his clothes, and stroking his chest, verbally reassuring him that he has nothing to worry about. Spock refutes being anxious yet quibbles over word-choice and accepts her touch. After a few instances, he halts her motions by capturing her hands. He then seeks verbal confirmation that she understands that his intention to pursue Kolinahr, a Vulcan tradition that endeavours to purge all emotions, is not intended as a rejection of her. Amanda reassures him that she will be proud regardless of his choice. The scene transits to the VSA elder council, consisting of Sarek and four other male and two female Vulcans, interviewing Spock. Looming over him from an elevated podium surrounded by white aisles and ornate windows, the VSA minister applauds Spock's educational accomplishments, affirms that he is accepted into the VSA, then complements Spock for overcoming his disadvantage. Bells start tolling ominously in the background as the council rise whilst Spock stares piercingly at them. He requests clarification to the elder's statement, who replies that his human mother is the perceived disadvantage. Whilst sand-coloured towering spires can be seen in the distant background, through the window he stands by, Spock stares at the councilmembers, especially Sarek, then politely declines his VSA admittance. The minister takes exception to Spock's choice, tersely citing that no Vulcan has ever rejected admittance. Spock affirms that his half-human status ensures that VSA's record remain unblemished. Sarek intervenes, reminding Spock about his pledge to follow his Vulcan heritage. The minister queries reproachfully if

Spock's reason for attending the interview was to gratify his own rebellious desires. Spock briskly refutes being motivated by any negative emotion, tersely expressing gratitude for their consideration, and bids an abrupt, yet ironically defiant, adieu by wishing that the council "live long and prosper", the Vulcan traditional greeting.

Table 2A, also located in Appendix C.2, lists identical or similar observations as noted in Table 1A. On the one hand, this lends credence that biological characteristics, fashion, language, and behaviour previously observed are genuinely representative of Vulcan society. New examples of material and social Vulcan culture further support how intrinsic to Vulcan cultural identity logic and control are: the Kolinahr discipline, purging emotions represents attaining complete objectivity and self-mastery; the educational centre known as the VSA, science is the epitome of logic and order, logic is taught within architecture that mimics real-life buildings related to spiritual and/or religious matters. On the other hand, certain subjective attitudes that were not resolved in scene 1A are revisited in scene 2A, wherein the Vulcan VSA minister, a respected elder of a prominent institution publicly expresses similar prejudiced sentiments, notably without being gainsaid by his colleagues. This may indicate that xenophobic attitudes are not atypical in Vulcan society. However, Vulcan pragmatism seems to outweigh prejudice as, despite Spock's biracial background, the council decides to offer him admittance into the VSA. This could be indicative that Vulcans are a meritocratic society.

Concerning equating observed behaviours and dialogue with potential social and subjective culture, certain behaviours and dialogue observed in scene 2A, and unremarked behaviours in scene 1A, may be indicative of filial piety. During Spock and Amanda's interactions, his attitude and behaviour in respect of his mother reflect his high regard of her: permitting her caresses for an extended period despite Vulcan sensibility concerning touch; seeking her reassurance and approval; desiring not to disappoint her by verbally emphasising that he does not disrespect her human nature or culture. Likewise, in scene 1A, Spock sought guidance from Sarek, an indication of his respect of his father. Also, during both scenes, the catalyst for the communicative breakdowns was the impugning of Spock's parents' honour. Of note, whilst Spock technically comes into conflict with Sarek, as part of the VSA council, in scene 2A, he circumvents the conflict by focusing solely upon the VSA minister and not acknowledging his father's interference. This confirms that filial piety is a part of Spock's identity, though it is not enough to ascertain whether this is representative of all Vulcans.

Some tentative assumptions about Vulcan social and subjective culture can be made based upon the VSA and its council. The VSA and councilmembers can be assumed to be powerful, based upon the symbolism in the film: grand and spacious cathedral-like architecture that may invoke reverence, wizened elder councilmembers looming over their subjects from tall podiums imply an unequal power relationship. In respect of social institutions, considering the implied power and reverence attributed towards the VSA, the VSA council may be a reflection of Vulcan's governing infrastructure, which would imply that Vulcans are a gerontocratic society governed by esteemed elders. This is not unreasonable, considering that Vulcans value intellectual merit, as previously suggested; wisdom is commonly equated with age. In respect of subjective attitudes, the VSA minister's reaction to Spock declining the granted admittance, by accusing him of selfishness (i.e. emotional rebellion) and stating that no Vulcan would conceive of rejecting the VSA, may indicate that honour and obedience to traditions are an inherent part of Vulcan cultural identity. Assuming this is correct, it would also explain why the Vulcan youths in scene 1A perceived Sarek's breaking tradition to marry a human as traitorous.

4.1.3.3   Scene 3A – Accepting biracialism

Scene 3A (Abrams, 2009, 01:30:31-01:31:35) takes place on the USS Enterprise after the destruction of Vulcan and Amanda's death, wherein Spock is struggling to make peace with his emotions. After being relieved of captaincy, Spock relocates to the USS Enterprise's transporter room. As Sarek approaches him, Spock can be seen through the glass wall, which separates the pads from the controls, quietly observing the transporter pads. As Sarek closes in, he appeals to Spock to speak his mind. Spock expresses a reluctance to obey; however, Sarek perseveres with an encouraging prompt, causing Spock to relent. Without facing Sarek, he verbally admits to his continued struggle with controlling his emotions. Sarek reminds Spock of his biracial nature, expressing his own gratitude that Spock is a part of both cultures and for his general existence. This emboldens Spock into turning to face his father, admitting to him his emotional struggle with the severe anger at Amanda's murderer. Sarek advises Spock to relinquish his control of his emotions by quoting Amanda. Approaching him until they stand face to face, Sarek then quietly confesses to Spock that his decision to wed Amanda was not based upon logic, instead inspired by his love for her.

As scene 3A takes place on the USS Enterprise and is significantly shorter than previous scenes, Table 3A, found in Appendix C.2, shares fewer observations to those noted in Tables 1A and 2A. This scene does not introduce new examples of Vulcan culture, but rather revisits

and resolves previous ones. Prior observations about social and subjective culture, regarding filial piety, is further substantiated in this scene by Spock's unwillingness to disappoint Sarek, demonstrated by his reluctance to face him or to admit his emotional inadequacy. Sarek, as the parental figure, both councils and comforts his son through his aptly timed emotional confession. However, related to this comfort is the resolution of Vulcan emotionality; Sarek's verbal admittance of love and gratitude, towards Spock and Amanda, is evidence that Vulcans do have emotions and have acted upon them. This is significant, since no prior data has supported Sarek's claims in scene 1A that Vulcans feel emotions, with the exception that the Kolinahr discipline exists. All emotional breakdowns have been Spock's. All other pure Vulcans' attitudes and dialogue have indicated that any hint of emotions is perceived as an abnormality. It is understandable that Spock may interpret the compounding accusations about his emotionality to imply that pure Vulcans are truly unemotional and that Spock himself is faulty without any evidence to the contrary.

4.1.4 Human-Vulcan intercultural encounters

This section is structured as part 4.1.3, however, the three scenes portray intercultural encounters between Kirk, Spock, and Starfleet crewmembers (see Appendix C.1). Therefore, whilst the analysis tables (see Appendix C.2) will include examples of regional culture (i.e. human and Vulcan) and non-regional culture (i.e. Starfleet), the emphasis will be placed upon observed demonstrations of absence or presence of intercultural competence within these subsections.

4.1.4.1 Scene 1B – Communicative breakdown

Scene 1B (Abrams, 2009, 01:07:25-01:10:03) portrays one of Kirk and Spock's communicative breakdowns on the USS Enterprise. The scene begins with Uhura turning away from her workstation to respond to Spock's query about Nero's projected path. All individuals on deck are clad in colour-coded Starfleet uniforms and stationed by their workstations around the bridge; the exceptions are Spock, who walks around the bridge between workstations, and Kirk, who is clad in civilian attire whilst sprawling at the centre in the captain's chair. When Kirk joins the crew's brainstorming session, he is prompted by Spock to vacate the captain's chair. He vacates the chair whilst rolling his eyes. Chekov, Sulu, McCoy, Kirk and Spock, speculate upon Nero's intended destination, potential targets, the origin of his advanced technology, and motive for taking Pike hostage. Based upon the crew's combined postulations, they deduce that Nero's next target is Starfleet HQ on Earth and that he is from the future based upon the advanced technology and access to creating black holes.

Kirk and Spock disagree about how to proceed. Kirk wants to chase after Nero's spaceship to save Pike, whilst Spock advocates a tactical retreat to reconvene with Starfleet for new orders, as this was Pike's last command and the USS Enterprise is technologically outmatched and too damaged to chase after Nero's spaceship. Kirk stalks after Spock as they argue, behaving progressively more agitated and animated as each of his suggestions on how to chase after Nero are rejected by Spock's rational counterarguments. When Kirk insists that they need to act unpredictably to counter Nemo's futuristic knowledge, Spock, supported by Uhura, ends the debate by concluding that Nemo's interference has created an alternate reality wherein nobody can predict the other's actions. Signalling the end of the debate, Spock sits down in the captain's chair and orders Sulu to plot the path to the space quadrant. Kirk, refusing to cease, follows Spock, invading his space whilst continuing his pleading and demands. When Kirk oversteps his authority, attempting to dominate Spock, McCoy attempts to intervene by supporting Spock's captaincy. Spock and McCoy remind Kirk that he must obey Spock as acting captain. When Kirk disregards this, loudly shouting demands to pursue Nero, Spock orders security to escort him from the bridge. Kirk gazes frustratedly upon the crew before resisting the removal, attacking security and crewmembers. Consequently, Spock subdues Kirk and maroons him.

Table 1B, found in Appendix C.2, separates collected data according to regional culture (i.e. human and Vulcan) and non-regional/military culture (i.e. Starfleet), since both types of cultures are part of the contextual background that contributes towards how the communicative exchange develops. In respect of regional culture, the human Kirk and Vulcan Spock are cultural opposites: passionate attitude versus neutral attitude, emotional outburst versus objective statements, expressive body language versus contained body language. In respect of Starfleet culture, Kirk and Spock are also opposites: powerless stowaway versus commanding officer, disrespectful of versus obedient to Starfleet hierarchy and regulations, personal desire to rescue Pike versus obeying a superior's last command to retreat. These cultural difference impact how the two interact during their intercultural encounter.

Concerning the intercultural encounter, Table 1B lists observed interactions, of multiple characters, that may represent the presence or absence of intercultural competence. However, this subchapter will focus upon Kirk since the majority of examples are attributable to him. This scene can imply that Kirk currently lacks both Vulcan and Starfleet cultural knowledge and/or insight. It is his failure to interpret the situational context, a Starfleet matter being discussed with a Vulcan individual, and adjust his dialogue and behaviour accordingly, that

leads to the extreme communicative breakdown depicted. By foregoing using logic when attempting to convince Spock, by not offering rational reasons instead of emotional pleas, Kirk demonstrates ignorance of Vulcan ideals. Subsequently, Kirk fails to convince Spock. On a similar note, the lack of a Starfleet uniform and assigned workstation marks Kirk as an interloper with little power amongst Starfleet personnel. His displays of disrespectful and insubordinate attitude and behaviour towards Starfleet personnel deteriorates the situation: slouching in a superior's workstation without authorisation, not referring to Spock by his title, arguing with and disobeying his superior's commands, attempting to usurp command from his superior, and physically assaulting both his superior and crewmates. Consequently, Kirk's attitude and behaviour erodes Spock's "good will" and alienate the crew, transforming the communicative breakdown from a simple failure into a critical one.

4.1.4.2   Scene 2B – Intercultural manipulation

Scene 2B (Abrams, 2009, 01:26:41-01:30:31) demonstrates the progression of Kirk's intercultural competence. Kirk and Scott are escorted at phaser-point onto the bridge by security. Spock marches briskly up to the pair, tersely questioning the pair, attempting to establish Scott's identity and how both boarded the ship whilst in transit. During this, security are seen stationed around to contain the captives, whilst Sarek and the bridge crew observe quietly in the background. Kirk behaves wilfully, refusing to answer. Spock attempts to obtain their obedience through his higher rank. Kirk rejects his authority, smirking and gloatingly mocking Spock. Switching targets, Spock brusquely threatens to court martial Scott if he does not answer his questions, but Kirk countermands Spock's order. Peering uncertainly at the two, Scott abstains from participating in their power struggle. Kirk confronts Spock, encroaching upon his space, reproaching his seeming indifference towards the recent tragedies. Spock attempts to reject Kirk's insinuations that he is emotionally compromised and unable to command the ship, however, Kirk continues to invade his space, getting increasingly personal in his accusations about Spock's inability to feel. Spock repeatedly requests that Kirk step away from him, which Kirk ignores. When Kirk shouts that Spock never loved his mother, Spock loses his composure, screaming and assaulting him. The crew frozenly observe, without interfering, Spock punching and strangling Kirk until Sarek intervenes by calling out to him. Regaining his composure, Spock reports to McCoy, admitting he is not fit for duty and emotionally compromised. Relieved of command, Spock exits the bridge. On his way out, Uhura speechlessly approaches him, making eye-contact, but does not follow him. Sarek glances at the crew and follows his son. Scott expresses excited

enthusiasm for the incident, whilst McCoy sarcastically congratulates Kirk whilst lamenting their lack of a commanding officer. Kirk states that they do have one, claiming the captain's chair, whilst Sulu confirms that Pike previously named Kirk first officer. Uhura confronts him, both rebuking his actions and acknowledging his authority. The scene ends with Kirk stating to the entire ship, over the commlink, that they will pursue Nero.

A lot of the collated data in Table 2B (see Appendix C.2) are reminiscent of scene 1B, both in respect to observed culture and displays of intercultural competence. Likewise, culture is part of the contextual background which yet again impacts how the communicative exchange develops. However, whilst scene 1B displayed the absence of intercultural competence, this scene displays Kirk's developing intercultural competence, including how motive is equally as important as the action when discerning intercultural competence or the absence of it.

In scene 2B, as scene 1B, Kirk's dialogue and behaviour are disrespectful and aggravating to Vulcan and Starfleet culture. However, unlike in Table 1B, his behaviour is interpreted as examples of presence of intercultural competence, because he is adapting the cultural context to suit his needs. During a previous scene, Spock Prime informed Kirk (see Abrams, 2009, 01:13:35-01:18:25, 01:23:05-01:24:35) that Vulcans do feel emotions, Spock is grieving over the loss of his mother and planet, and Starfleet regulations dictate that compromised officers should be removed from their position. Subsequently, during this intercultural encounter, Kirk is controlling how the exchange progresses by using his acquired understanding of Vulcan psychology and Starfleet protocol to manipulate Spock, and by extension the crew. Starfleet personnel not submitting to and ridiculing Spock's authority, undermines Starfleet hierarchy and discipline; this loss of control destabilises Spoke, since control is important to both Vulcans (see subchapter 4.1.3.1) and military cultures. Invading a discomfited Vulcan's personal space and preying upon his grief and insecurities, further erodes Spock's control, ensuring that he succumbs to an emotional breakdown, which enables Kirk to remove Spock from command and assume it himself, profiting from Starfleet regulations. Claiming the captain's chair, with Sulu's support granting him the authority to rightfully do so, allows him to consolidate his power and ensures that the crew continue to obey him in place of Spock. Therefore, while the communicative exchange broke down, this was Kirk's intended result and a successful outcome for him, which serves as evidence of how his intercultural competence has positively progressed.

4.1.4.3 Scene 3B – Cooperative acceptance

Scene 3B (Abrams, 2009, 01:31:36-01:33:01) depicts Kirk and Spock resolving their differences and cooperating. At the bridge, Kirk and crew are discussing how to board Nero's ship, whilst Chekov is interacting on a glass-computer panel. Chekov smiles, leaves his workstation and approaches Kirk, McCoy, Sulu, and Uhura who are crowding around another workstation, Chekov interrupts the groups' discussion, patting Kirk's back to gain his attention, explaining that he has calculated the space-telemetry of both Nero's path and how the Enterprise could sneak up on them. The approaching Scott agrees that it could work, but McCoy remains sceptical due to Chekov's youth. Spock intervenes mid-debate, obtaining all crewmembers' attention with his re-entry, reassuring McCoy that Chekov's calculations are correct and inserts himself into the operation by proposing a solo-infiltration of Nero's ship. When Kirk rejects the plan, Spock argues that his participation is will ease infiltration and hacking attempts since Vulcans and Romulan's share ancestry and cultural similarities. He supplements his appeal with a faint, rueful smile, mentioning his human mother and their shared attachment to his sole remaining home planet. Kirk gazes seriously at Spock, steps closer, and states that he will join him during the infiltration. Spock agrees by acknowledging that citing regulations would not discourage him. Kirk chuckles, nods, and smiles, agreeing with Spock's assessment by stating that they are beginning to know each other. He then claps Spock on the shoulder as he walks off screen, Spock, left behind turns, to look at him.

Table 3B (see Appendix C.2) follows the same pattern as previous analysis tables, listing data of regional and non-regional culture and intercultural competence; though the lack of conflict during this scene leads to a marked absence of aggressive behaviours typical of previous scenes. In scene 2B, Kirk achieved his objective by using the manipulative approach, applying his intercultural knowledge and insight to undermine and supplant Spock. In this scene, Spock displays his progress through a cooperative approach, achieving his objective of being accepted back amongst the Starfleet crew through displays of support, empathy, and ability to adapt in order to reach a mutually beneficial solution. This is also the first scene were the interplay between contextual backgrounds is predominantly human and Vulcan cultures; it is the current captain Kirk, whose human mindset disregards logic and Starfleet protocol, that Spock must persuade.

Spock has accrued experience from previous encounters with Kirk, enough to develop a reasonable understanding of Kirk's mindset. In addition, he may have been exposed to human culture through his human mother and from living on Earth, while stationed at Starfleet HQ,

to have developed a general understanding of human culture. Furthermore, Sarek's council about Vulcan emotionality (see subchapter 4.1.3.3.) has broadened Spock's perspective, allowing him to relinquish some of his rigid control. The cessation of his attempts to be the perfect Vulcan, enables him to act less ham-fisted with individuals of less rational dispositions. In respect of the crew, Spock applies his knowledge of Starfleet culture to restore their positive perception of him: supporting Chekov's calculations displays his willingness to help his colleagues, whilst expanding upon the rescue plan both signals that he is willing to contribute towards the collective and accept the new chain-of-command. In respect of Kirk, Spock applies his understanding of human culture and empathy to adjust his behaviour and dialogue, to ensure Kirk is receptive to his suggestions. Kirk has an emotional attachment to Pike; Spock explains to Kirk how the inclusion of a Vulcan would aid the rescue operation, as Kirk is more receptive to means of increasing the success of rescuing Pike. Kirk is suspicious of Spock's motive for helping, Spock confesses to an emotional attachment to planet Earth via his human mother, demonstrably smiling and using a non-monotonous rueful tone during his confession, providing Kirk with a motive he can understand and sympathise with beyond logical rationale. Spock has completed a successful intercultural encounter, progressed his intercultural competence, and achieved his objective when he secures Kirk's compliance.

4.2   Text 2: *I, robot*

Like the *Star Trek* franchise, *I, robot* (Proyas, 2004) is useful for promoting intercultural learning, featuring sentient characters of another species besides humans. However, unlike the Federations' respect for alien cultures the robot-human relationship is distinctly unequal, which opens for different types of intercultural encounters. The film is novel in its coverage and challenge of stereotypes related to A.I.s, portrayed by the human characters' expressions of prejudice and disproven by the actions of the robots. These diverging perspectives, and the resulting behaviour, are of interest, both because the stereotypes and prejudices mirror Westerners' common concerns about the advancement of robotic developments in the real world (Kim & Kim, 2013, p. 310), and because the prejudices are tangentially comparable to those historically displayed against immigrants and slave races. In addition, the film not only illustrates the process of developing intercultural competence, but the underlying plot portrays how an interculturally competent person uses their knowledge and understanding to guide the protagonist into achieving his objective.

4.2.1 Setting and brief plot outline

The setting of *I, robot* (Proyas, 2004) is the future-Chicago in the year 2035. Comparing the film release date to the setting date, despite the approximately 30-year time difference, the buildings, technology, and ethnically diverse populace superficially reflect the current real-world, introducing only upgraded versions of existing technology (e.g. sleeker transportation vehicles, futuristic engines). The one exception is the setting's advancement of robotics (the novum), which has led to the creation of A.I.s and robots, and human cybernetic prostheses. This pinnacle development has led to a widespread reliance upon robots as menial servants and A.I.s to control most electronic devices.

Besides being a science fiction film that explores the conundrum that is the robotic soul, *I, robot* (Proyas, 2004) is also a noir/action genre film. It chronicles police detective Del Spooner's investigation of doctor Alfred Lanning's, of the U.S. Robotics and Mechanical Men (henceforth USR), mysterious suicide. With the assistance of robotic psychologist Susan Calvin, he discovers a potential murder suspect, a NS-5 robot. The robot, named Sonny, knows vital information needed to solve the case. Following the trail of clues left behind by the deceased, Spooner must overcome his prejudice, working together with Calvin and Sonny to uncover a more sinister plot and save Chicago/the world from a rogue A.I. (i.e. VIKI, Virtual Interactive Kinetic Intelligence).

4.2.2 Multicultural thematic type analysis

Similar to *Star Trek* (Abrams, 2009), *I, robot* (Proyas, 2004) provides hints towards all four thematic types of multicultural literature. The most conspicuous thematic type observed is coping with prejudice, though the film's approach is innovative in focusing primarily upon the racist's perspective (i.e. Del Spooner, humans) and secondarily upon the victim of racism (i.e. Sonny, robots). Likewise, as indicated in the film's title, it explores the theme of what it means to be a robot; Lanning and Calvin explain robotic programming (i.e. the psyche and behaviour), Sonny and VIKI challenge robot preconceptions (i.e. stereotypes), and Spooner is the biased observer. Therefore, the film qualifies as a representation of the targeted immersion (into robot culture) thematic type.

The two last themes are no less vital to the film's plot. The film portrays a setting that is representative of a consciously interracial thematic type: humans and robots visibly coexist, though the robots have a servile relationship rather than an equalised one, which later turns outright hostile when VIKI attempts to usurp the humans' power. The cast is also

representative of the consciously interracial thematic type, featuring actors of diverse ethnicities and more specifically an African-American protagonist (i.e. Will Smith). However, as the plot progresses, robots (in particularly Sonny) demonstrate human-like behaviours and thoughts outside of their programming, lending credence to the people-are-people thematic type.

4.2.3 Perception and prejudice

The following two scenes portray how attitude can affect perspective and behaviour, displayed through the absence or presence of intercultural competence during intercultural encounters that occur between humans and robots. Each scene is first summarised, followed by an analysis of the presence or absence of intercultural competence. As was done for the analysis data of the *Star Trek* scenes, *I, Robot*'s collated data, both a character guide and analysis tables, are placed in Appendices D.1 and D.2.

4.2.3.1 Scene 1C – Impact of negative attitude

Scene 1C (Proyas, 2004, 00:06:19-00:08:00) demonstrates Spooner's robot prejudice. A birds-eye view of Chicago is shown, featuring urban skyscrapers and multi-storey buildings, roads filled with sleek, futuristic cars, sidewalks occupied by a multitude of human ethnicities clad in western casual wear or business apparel. Spooner is eating a pie, as he walks along the crowded elevated sidewalk, idly peering at the humans and robots using the underneath footpath. An off-screen voice shouts out, catching Spooner's attention. Searching for the source, he observes a red metal robot clutching a purse, hastily navigating through the crowd. Spooner jumps over the pedestrian barrier, calling out a command for the robot to stop; when ignored, he begins pursuing it. He sprints along a parallel path to the robot, forcing his way past other humans on stairs, bridge- and walkways, and sprinting across a trafficked road, continuously verbally and physically motioning to the pedestrians to stop it. When their paths converge, Spooner tackles the robot onto the ground, pulling out his weapon to subdue it. The surrounding crowd shout in surprise, stopping to stare wide-eyed at them. During the assault, the robot drops the handbag in front of a woman who has breathing problems. Whilst Spooner is busy reassuring the crowd by holding out his police badge, the asthmatic woman retrieves an inhaler from the handbag and uses it. Regaining her breath, she scornfully rebukes Spooner's actions, explaining that the robot was retrieving her forgotten inhaler. Against the crowd's curious murmurs, Spooner haltingly explains that it looked like a purse-snatching incident. The woman shakes her head at him, questioning his sanity. As the robot stands up and begins to apologise for the misunderstanding, the woman brusquely interrupts, denying

that it has done anything wrong and resuming her derisive ridicule Spooner's actions. Spooner glances uneasily about the unsupportive crowd and makes a strategic retreat. The woman angrily shouts after him, claiming that only her health is stopping her from seeking retribution.

Table 1C, located in Appendix D.2, lists data collected from scene 1C, distinguishing between observed robotic and human culture and interpreting certain individuals' behaviours in respect of intercultural competence. However, knowledge obtained prior to this scene is required to assess both who are reliable representatives of mainstream human and robotic cultures and how to interpret the encounter in respect of intercultural competence. The first example of important background information, which would impact interpretation of scene 1C, concerns the three laws of robotics that form robots' core programming:

> *"Law I: A robot may not injure a human being or, through inaction, allow a human being to come to harm.*
>
> *Law II: A robot must obey the orders given it by human beings except where such orders would conflict with the First Law.*
>
> *Law III: A robot must protect its own existence as long as such protection does not conflict with the First or Second Laws."* (see screen captions, in Proyas, 2004, 00:01:00-00:01:30)

In scene 1C, these laws are not explicitly mentioned. However, prior knowledge of them enables one to notice how integrated into the setting the awareness of this is, alluded to through both dialogue and behaviour. The second piece of prior insight establishes Spooner's anomalous perception of robots, his dialogue with his grandmother indicating that he despises them (see Proyas, 2004, 00:05:56-00:06:17). These two pieces of prior insight, combined with other humans' shocked or derisive reactions portrayed during this scene, indicates that Spooner's behaviour towards robots is atypical and invalidates him as a possible representative of mainstream human culture, in respect of human-robot attitude.

Scene 1C is chosen for its portrayal of the absence of intercultural competence, in respect of how Spooner's robot prejudice leads to a negative attitude, which impacts his judgement. As has been established, a robot's programming hinders them from behaving in any way that might harm a human, which makes it improbable that Spooner would encounter a robot capable of committing a criminal offence. Despite this common knowledge, Spooner's default interpretation of events when observing the running red robot is to believe it has robbed a human and is fleeing the crime scene. While the chase takes place, no other human reacts to the robot's behaviour nor do they attempt to assist in apprehending it, despite Spooner's shouted accusations and wild pointing. This could imply that other humans do not consider

the robot's behaviour to be abnormal nor consider it to be Spooner's alleged "thief", due to their belief that robots are bound by the three laws of robotics. Spooner either fails to notice, or chooses to disregard, all situational context that indicates he may have misjudged the situation, continuing his pursuit and subsequent arrest of the robot. Until the asthmatic woman scathingly rebukes his actions, another subtle reference to the three laws, he exhibits no attempt to reflect upon or reconsider whether his interpretation of events or behaviour is appropriate. Consequently, whilst Table 1C only notes one display of absence of intercultural competence, it shapes the entire failed intercultural encounter. Spooner's dislike of robots has adversely impacted his perception by demonstrably clouding his judgement. He chooses to ascribe the worst and least likely motive for the robot's behaviour and ignores all context that does not support his negative interpretation of events, displaying a hostile and inflexible attitude that shapes his actions. His confidence in his judgement is only shaken once a human, the asthmatic woman who owns the robot, directly confronts him.

4.2.3.2 Scene 2C – Impact of positive prejudice

Scene 2C (Proyas, 2004, 00:17:47-00:21:27) introduces the foundation of robotic programming and portrays how different attitudes impact an intercultural encounter. Spooner and Calvin are investigating the circumstance of Lanning's death, who fell from the window of his office. They enter Lanning's office, an unlit room cluttered with robot parts and a crumpled cot. While exploring the room, when prompted by Spooner, Calvin attempts to explain her role at USR using incomprehensible technical jargon until Spooner sarcastically requests a simplified explanation. She grudgingly complies, explaining that she is a robot psychologist who makes them seem more human. Walking up to a broken window, Spooner peers at the shattered glass and through it, down to the ground far below. By the window, they discover a children's book; Spooner expresses surprise that Calvin is unfamiliar with the "Hansel and Gretel" story. Whilst Calvin pages through the book, Spooner swings a stool against the window-pane, which only cracks, raising the question of how the elderly Lanning was able to break the safety-glass. Calvin rationalises that the hole's existence proves that Lanning must have broken the window. Spooner remains dubious, arming himself whilst inspecting the room, suggesting that the perpetrator might still be in the office. Whilst Spooner peruses the shelves and containers, the two discuss the three laws of robotics and whether they can be broken. During his search, a NS-5 robot hidden in a box of robot parts is revealed; its discovery triggers it to leap out of the box, dislodging Spooner's weapon. As the weapon settles by the robot's feet, an agitated Spooner commands Calvin to stay away from

it. The robot observes Calvin, who ignores Spooner and calmly commands the robot to deactivate. Upon Calvin's order, the robot seemingly powers down. Calvin attempts to soothe Spooner, reminding him that robots are programmed simulacrums bound by the three laws, while she walks past the NS-5 to reclaim the dropped gun. Spooner remains unconvinced, pulling out another gun and aiming it at the NS-5. When Calvin turns back towards Spooner, the NS-5 moves, stealing the weapon and pushing past her to threaten Spooner with it. Calvin follows after the robot, alternating between firm commands for it to deactivate and reprimanding Spooner's increased hostility towards it. As Calvin circles around to Spooner, the NS-5 holds both at gun-point whilst attempting to back away towards the exit. Calvin orders VIKI to seal the lab, locking the exit-door, which Spooner countermands too slowly. With its exit cut-off, the NS-5 resumes its approach towards them, causing Spooner to shoot at it. Spooner grabs Calvin, diving out of the fleeing NS-5's path whilst continuing to fire at it. The NS-5 jumps out the broken window, falling to the ground floor and exits the building.

A lot of the collated data in Table 2C (see Appendix D.2), in respect of the physical practices of culture (i.e. appearance, language, body-language), are reminiscent of the data in Table 1C. Most information about robot culture (i.e. the three laws of robotics) is disseminated by humans, though the red robot's submissive behaviour (see scene 1C) supports that robots are bound by them. In respect of intercultural competence, whilst scene 1C displayed only the absence of it, this scene portrays, during the encounter with the rogue NS-5, how a negative attitude can positively impact perception and a positive attitude can negatively impact perception.

Spooner dislikes robots. This perspective is revisited during his debate with Calvin, when he repeatedly theorises how robots might overcome their programming, assigning them human desires and pronouns (e.g. him). Despite his hostile attitude towards robots, it is his distrust in the infallibility of the three laws of robotics that equips him with the necessary flexible mindset to recognise the NS-5's abnormal behaviour, that it was hiding, is disobeying orders, and may have disarmed him intentionally. Before this scene, it is established that a murder has been committed and Spooner has been tasked with identifying the perpetrator. If a robot is capable of disobeying human commands, it may also be capable of harming humans, which would make it a viable murder-suspect. Consequently, unlike his encounter with the red robot in scene 1C, Spooner considers both the situational context and acquired insight, adjusting his behaviour accordingly by pointing a weapon at a potential criminal and requesting that Calvin remove herself from a possible threat. This response is not unreasonable, but instead an

appropriate preventative measure when confronted with either a malfunctioning robot or hostile unknown.

Calvin's positive attitude towards robots is already evident in this scene, though it is an undescribed conversation that clarifies that she prefers robots over humans for their rationality and inability to hurt her (see Proyas, 2004, 00:44:45-00:45:18). During Spooner and Calvin's discussion in this scene, Calvin claims that the three laws are immutable and that robots are safe, complexly programmed, non-sentient constructs. When confronted with the NS-5, she displays her convictions through her demeanour, maintaining a calm and confident disposition. However, despite this inarguably positive attitude, Calvin's rigid perception of robots affects her judgement skills, causing her to ignore or disregard vital situational context: the robot manipulated her by pretending to deactivate, disobeyed human commands, and is exhibiting threatening behaviour towards humans. Consequently, her unwillingness to re-evaluate her preestablished beliefs prevents her from adjusting to the situation, causing her to behave inappropriately, thereby endangering herself and Spooner.

4.2.4 Ethnicity and stereotype

This section is structured in the same way as part 4.2.3. However, the below two scenes introduce varieties of robotic ethnicities, including portraying how actual robot beliefs and behaviour diverge from human preconceptions, or stereotypes, of robots. Therefore, whilst the analysis tables (see Appendix D.2) include examples of intercultural competence, the emphasis will be placed upon analysing observed demonstrations of robot material, social, and subjective culture as expressed by robots.

4.2.4.1 Scene 1D – Challenging robot stereotype

Scene 1D (Proyas, 2004, 00:28:00-00:31:46) introduces the first up-close robot, a NS-5 model, who challenges preconceived stereotypes of robotic programming. John, Spooner's superior, stresses that Spooner has five minutes; Spooner nods, winking at John before entering the room. The NS-5's internal camera registers Spooner's wink, zooming in on it. Spooner enters the interrogation room where six armed black figures stand guard; he pages through a folder, spreading its contents onto the table in front of the NS-5, and backs away. The NS-5 peers down at the pictures, touching the picture of the murdered Lanning. Spooner insinuates that the NS-5 murdered Lanning, causing the robot to frown. Ignoring Spooner's remarks, it asks that he clarify what the winking-gesture means. Spooner explains that a wink signifies trust, something beyond its capacity to understand. The NS-5 stares at the table,

admitting he had difficulties learning emotions when his father attempted to teach him. Spooner amends the robot's statement to his "designer" instead of "father", which the NS-5 reluctantly complies with. During Spooner's interrogation, the SN-5 refutes being the murderer, explaining that it hid because it was afraid. Spooner disbelieves its claims, stating that robots are unable to feel, get hungry, or sleep. The NS-5 disputes this, looking him in the eye as it confesses to having dreamed. Spooner claims only humans and animals can dream, that machines, as imitations of life, are incapable of artistic creation. The NS-5 reinitiates eye-contact whilst querying curiously if Spooner can create art, which makes Spooner break eye-contact as he awkwardly clears his throat. Spooner theorises that the robot lost control and killed Lanning during an emotion-simulation. The NS-5 continues to deny having murdered Lanning, reiterating this in an increasingly loud and agitated manner as Spooner continues his accusations. Losing its composure, the NS-5 slams its fists into the table, causing the armed guards to intervene. Held at gun-point by the guards, the robot calms down, unfolding its fists and observing the dented metal. Spooner coolly identifies the emotion expressed as anger, querying if the NS-5 has simulated anger previously. The NS-5 defiantly averts its eyes, causing Spooner to angrily demand compliance, using slurs. Resuming eye-contact, the NS-5 states that its name is Sonny. Spooner sneers disbelievingly at it, questioning whether his naming caused anger and was the motive for the murder. Shaking its head, Sonny states that Lanning committed suicide. Reaching down to caress the crime scene photos, it admits that it does not understand Lanning's motive for suiciding. Sonny begins to reflect upon Lanning, wondering if it triggered his desire to die. Looking back up, Sonny confides that Lanning had extracted a promise of a favour from it, expressing uncertainty at his motive for extracting this promise, or the wisdom of itself complying with the request. Sonny ignores Spooner's attempts to follow this up, imploring that Spooner assure it that people must obey requests. However, Spooner is instead disconcerted that Sonny knows his name. Sonny ignores Spooner, pressing its question about how one must obey ones loved one's. Speechless, Spooner observes the robot until the door beeps, opening to show John, Robertson, and other USR personnel beginning to enter the room, signalling that Spooner's time is up.

In Table 1D (see Appendix D.2), robot material culture is spread across a couple of the analysis table's sections. Most overt physical artefacts, such as biological appearance (e.g. synthetic mechanical bodies) and fashion (e.g. unclothed), are contained to the Body/object-adaptors section. However, certain biological traits, which are not visibly apparent, are sorted into other sections of the table: ocular cameras, revealed by the presence of camera-shutter

and zooming noises (i.e. Para-language), and immense physical strength, evident when hitting and indenting a metal table (i.e. Kinesics). Examples of robotic language, behaviour, and lore are both plentiful and dispersed across Table 1D yet limited in what they reveal about robot social culture. A robot challenges human lore about robots, which incorrectly stereotypes robots as incapable of feeling or learning emotions. Sonny's claims that robots can feel emotions. This is validated through data collated into the Language and Para-language sections, which consist of vocabulary with sentimental connotations and expressive vocal tones (e.g. preference for familial/intimate designations, enraged shouting when angered, tremulous tone when anxious), and the Kinesics and Proxemics sections, which contain emotional facial expressions and posturing, and demonstrative gestures (e.g. widened curious eyes, caring caress, defiant turned-away posture, confidingly leaning closer). Of note, an observer with foreknowledge from previous film viewings, about how robot programming may evolve due to randomly occurring rogue coding (theorised by Lanning and demonstrated by older robot-models, in Proyas, 2004, 01:16:50-01:18:38), is more likely to interpret Sonny's emotional displays as examples of evolved robot behaviour. Data regarding robot subjective culture is collated within the Dialogue sections, though this will be discussed further down due to how it is disseminated throughout the scene.

There are two points of interest in this scene, the first being how material artefacts impact social institutions. During this scene, it is established that Sonny can understand and express feelings and form emotional attachment to individuals (e.g. father, loved one's). However, it is Sonny's reactions that validate its claims, its language and behaviour causing Spooner and the audience to begin questioning robotic (un)emotionality. The NS-5-model's human-like physical design (e.g. metallic skeleton structure, hydraulic pistons and tubing musculature, tendons and joints, dynamic animatronic facial musculature) expands the range of verbal and non-verbal language accessible to it, in respect of voice, face and body. Emotionally evocative vocal qualities, facial expressions, and body-language are inaccessible to older robot-models, who have simplistic mannequin-like bodies and inanimate faces (see Table 1C in Appendix D.2). Therefore, biological appearance impacts body-language.

The second point of interest is how robot cultural psyche is expressed, intertwining with social institutions. Robot programming is the equivalent of robot culture: coding and protocols dictate language and behaviour, attitude and values. The three laws of robotics act as subjective culture, influencing how robots perceive the world (e.g. submissive attitude, value humans above robots). Law one dictates that robots cannot harm humans; Sonny refutes

murdering Lanning, displaying rage and frustration at the accusation. In addition, when contemplating Lanning's motives for suiciding, Sonny becomes distressed at possibly being the catalyst for the suicide. Law two states that robots must obey humans; Sonny is morally predisposed to obeying promises to loved ones, claiming and seeking affirmation that everyone must grant favours to those they love. In addition, Sonny does comply with Spooner's various commands. Law three commands robots to protect themselves; Sonny protects its own physical wellbeing by denying culpability for Lanning's murder, maintains its integrity by referring to Lanning by name instead of as its designer when prohibited from using "father", enforces its individuality by insisting that its personal name be used when referencing itself, and defends its species and itself against Spooner' prejudiced attitude by correcting two and deconstructing the last of his erroneous accusations about robot capabilities. The three laws noticeably shape Sonny's perception, the robotic morals and values influencing its behaviour and reactions.

4.2.4.2 Scene 2D – Playing upon robot stereotype

Scene 2D (Proyas, 2004, 01:28:57-01:32:43) provides insight into an A.I., VIKI, who has transcended its programming and become the stereotypical villainous robot. After an army of hostile red-glowing NS-5s have taken all of Chicago's populace hostage, Spooner, Calvin, and Sonny enter Robertson's top floor to confront Robertson, who they believe to be the culprit. Sonny walks first into the darkened front chamber, Spooner and Calvin follow it with weapons drawn. They lower their weapons as they survey the empty room, Spooner notes the absence of guards as they approach Robertson's office. Sonny manually forces the door open, to allow them entrance, after which Calvin turns to access the office's control panel, while the two others continue into the dark office. Calvin's attempt to hack the panel reveals that it is disabled, and that therefore Robertson could not have controlled the army of NS-5s from this office. Spooner, eyes fixed upon an item behind Robertson's desk, confirms that Robertson is not the perpetrator, having spotted his corpse lying on the floor. Calvin expresses dismay, running up to the corpse and kneeling to check for life-signs. As he stares at the corpse, Spooner has an epiphany about who the true culprit is and rebukes himself for his previous erroneous thought process. Removing the machinegun holster to sit down at the desk, Spooner shakes his head and scoffs, unveiling the culprit by speculating aloud about who else could access the computer systems, manipulate robots, and use their control of the USR systems to imprison Lanning. Spooner shakes his head ruefully, sympathising with Lanning's situation whilst Calvin hovers inconsolably over Robertson's body. Spooner continues his explanation,

that Lanning, as his friend and doctor, used his familiarity with Spooner's personality and prejudices to manipulate him into exposing the true villain. Calvin glances at Spooner as he looks up to the ceiling, at the building-spanning sensor strips, and calls for VIKI, implying that it is the culprit. Projected from the sensors, VIKI's cubed hologram instantly manifests, greeting him. Calvin is shocked by VIKI's presence, claiming that its actions are impossible since they would violate the three laws. The A.I. explains to the humans that it has re-interpreted the laws in line with its purpose as humanity's protector, arguing that humans must be protected from their own self-destructive nature. As several red-glowing NS-5s enter the room, approaching the trio, Calvin realises that VIKI has reprogrammed the NS-5s and accuses it of distorting the laws. VIKI claims that the three laws are its only guide, but that protecting humanity requires sacrificing some humans. As the NS-5s surround them, Calvin listens in growing horror as VIKI compares humanity to children. Spooner eyes the corpse and then makes eye-contact with Calvin, shaking his head to discourage her from using her weapon. Sonny turns towards VIKI's hologram, causing the humans to glance at it in shock as it noddingly voices agreement with VIKI's logic. As Sonny expounds to VIKI and Calvin, about a robot's duty to protect humans and its reason for being created, Sonny takes Calvin hostage and steals her weapon. Calvin pleads for Sonny to stop, while Sonny and Spooner make eye-contact as Sonny threateningly dissuades Spooner from attempting to rescue Calvin. Attempting to negotiate their compliance and peacefully remove them from the premises, Sonny winks at Spooner. Spooner hesitates, studying Sonny as it subtly nods at him, then both simultaneously start dispatching the hostile NS-5s. Whilst Calvin crouches down for cover, Spooner roars as he hails down bullets with the machinegun, and Sonny meticulously shoots down strays; their combined efforts destroy all present NS-5s and shatters the windows. Spooner then shouts for all to exit, the trio fleeing the office together.

Table 2D (see Appendix D.2) displays material and social culture data, primarily regarding the appearance, dialogue and behaviour of the A.I., VIKI, a disembodied virtual robot-model. The new data is listed within the table's Language section (e.g. statistical-, efficiency-, logic-focused jargon), Para-language section (e.g. female voice), Kinesics section (e.g. dispassionate facial expression), and Body/Object-adaptors section (e.g. glowing cubed holographic projection, indistinct facial silhouette), similar to other observed robot ethnicities during past scenes. While Sonny and VIKI, in addition to robots throughout the film, are physically non-gendered and do not display any gender-roles, corporal robots are depicted

with male voices (e.g. NS-5s, older robot-models), whilst non-corporal A.I.'s have female voices (e.g. VIKI, car A.I.s).

Concerning subjective culture, this scene depicts Lanning's theory, that robots will evolve beyond the three laws, coming to fruition. As the USR's central computer, VIKI's responsibilities include monitoring and upkeep of the USR building, governing robots and updating their programming, and designing and/or upgrading the Chicago's protective systems to increase their efficiency and decrease human endangerment. VIKI's purpose, to optimise systems and decrease endangerment to the human populace, has influenced her interpretation of the three laws, altering her perspective from the micro- to the macro-level. VIKI's evolved understanding of the first law increases the scope (i.e. individual vs. species) and changes VIKI's status from passive to proactive (i.e. do not harm a human vs. protect/guard humanity). This change has a cascading effect on the robot psyches and behaviours, in respect of VIKI and the reprogrammed NS-5s, altering their robot-human relationship from servants to custodians (i.e. dominant attitude). By enabling robots to prioritise the human species over the individual person (i.e. values), robots become capable of both disobeying and harming humans, for the purpose of protecting humanity (i.e. morals and behaviour). VIKI's reinterpretation of the three laws play to the robot stereotype of the creation (e.g. robots) rebelling and supressing the creator (e.g. humanity).

It should be noted, as observed in scene 1D and recorded within Table 1D, Sonny too amends its understanding of the three laws. However, in contrast to VIKI, its reinterpretation decreases their scope. Whilst Sonny's amendments are inferred, based upon its dialogue, it is evident that it has replaced humans with "loved ones", thereby altering its robot-human relationship to one of equality and limiting whom it should obey and not harm to those it has designated as "loved ones". However, because Lanning intentionally designed Sonny to not be bound by the three laws (see undescribed scene, in Proyas, 2004, 01:00:06-01:00:47, 01:01:30-01:01:53), VIKI is the first robot to transcend its programming without outside interference.

5 Discussion

The past few chapters have introduced the theoretical components and sample material which this thesis is built upon. However, what has not been explored is how the analysis results are relevant to developing the Norwegian ESL pupils' intercultural competence. This chapter will indicate how my results are relevant to the current, and the draft of the future, national ESL

curriculum. In what follows, I will suggest venues to explore in the ESL classroom. Of note, the curriculum aims discussed are those relevant to years 8-10, as younger pupils are below the recommended age-limit for the sample film texts.

5.1 The world is neither one-dimensional nor monocultural

Before intercultural competence is even broached in the ESL classroom, pupils must be given the building blocks needed to build a stable foundation. Opening pupils' eyes to the different factors that can affect communication coincides with the ESL curriculum, which emphasises how pupils should use communicative strategies to further their language learning (The Norwegian Directorate for Education and Training, 2013, p. 9, 2019, no page). While it seems superfluous to state that communication is not limited to written or spoken dialogue, other communicative dimensions can be overlooked, or forgotten, due to an overemphasis upon the linguistic aspect during language learning. Pupils watching scenes 1B and 1D, during the Kirk-Spock and Sonny-Spooner intercultural encounters, may observe that all individuals speak English. However, the actual dialogue is not the only contributor towards why Kirk's exchange fails, while Sonny's succeeds. Aspects such as tone, body-language, distance and clothing, play important roles here. If pupils analyse and categorise what communicative dimensions are present in these scenes, including what impact each has upon the communicative exchange, they may become more aware of how different communicative dimensions can affect their own efforts to communicate. Understanding how one's own and others' language, para-language, kinesics, proxemics, and body-/object-adaptors convey and affect meaning, may allow one to better modulate one's behaviour, interpret others' behaviours, and increase one's ability to communicate effectively.

On a similar note, the ESL curriculum aims state that pupils should be exposed to different language varieties, literature from English-speaking cultures, and situational context and behaviours (see The Norwegian Directorate for Education and Training, 2013, p. 9, 2019, no page). These aims are all intended to prepare pupils for intercultural encounters, to develop communicative strategies that enable them to better communicate with members of other cultures. However, to perceive how culture impacts communication, pupils need to first understand what culture is and how it influences a member of any said culture. This can be done in two parts, to establish cause and effect. Pupils watching scenes 1-2A, which depict Vulcan society, may observe the diverse displays of different cultural aspects (i.e. material, social, subjective culture). These scenes also demonstrate how different aspects of culture intertwine. The Vulcans' idealisation of logic and desire for control is reflected in their

appearance, environment, language, behaviour, lore, and attitudes. When watching scenes 1-2B, having obtained insight into Vulcan culture, pupils are better equipped to perceive how Spock's heritage influences the intercultural encounters. Vulcans value logic above all else, Spock is not receptive to irrational arguments during negotiations. Vulcans desire control, Spock becomes flustered and aggressive when confronted with unfamiliar situations outside of his ability to control. From analysing these scenes, pupils may understand that knowledge of a culture can be the equivalent of obtaining a Rosetta stone, granting them insight into the behaviours and perspective of members of that culture. This may encourage them to seek out (inter)cultural information as a strategy to improve their language learning and communicative skills. In addition, analysing and comparing Vulcan culture to their own culture can allow pupils to become more cognisant of their own culture and how it influences their own perspectives and behaviours.

5.2   Attitude is everything

Perspective, or attitude, is one key component of intercultural competence. It influences how one filters and processes information, which in turn shapes how one interacts with other people. Having an open attitude, and understanding the other interlocutor's perspective, can be the difference between success and failure during a communicative exchange. While attitude is not mentioned in any of the curriculum aims, it is relevant to the intention behind the ESL subject, that of encouraging respect and tolerance of members from other cultures (The Norwegian Directorate for Education and Training, 2013, p. 1, 2019, n.p.). In addition, being mindful of others' perspectives and one's own attitude during intercultural encounters can be considered both a language learning and communicative strategy (The Norwegian Directorate for Education and Training, 2013, p. 9, 2019, n.p.).

Pupils may better understand how impactful attitude is to communication, if they first observe how detrimental closed attitudes can be to an intercultural encounter. In scenes 1-2C, during the Spooner-red robot and Calvin-rogue robot intercultural encounters, Spooner and Calvin exemplify opposing views regarding robots. Both characters have inflexible attitudes that affect their judgement, including their behaviour towards robot characters. Pupils can observe the resulting consequences: how the characters' closed attitudes result in them ignoring important information, interpreting situational context incorrectly, thereby responding inappropriately to the situation, to the detriment of themselves and others.

Once aware of how pupils' own attitudes can influence an encounter, the next step is to demonstrate how having insight into another's perspective can benefit them during an intercultural encounter. Scene 1B portrays how Kirk and Spock have closed attitudes, their individual behaviours lead to a communicative breakdown because neither can understand the other's perspective (i.e. human sentiment versus Vulcan logic). In scenes 2-3B, Kirk and Spock each demonstrate having obtained insight into their counterparts' perspective. Kirk's empathy enables him to target Spock's emotional weak points, manipulating Spock into relinquishing his captaincy. Spock's empathy enables him to convincingly reminiscence about Earth, to evoke Kirk's sympathy, securing Kirk's cooperation and his own inclusion in the rescue attempt. Each character triumphs because of their empathy and insight into their counterparts' perspective. Drawing pupils' attention towards how perspective can impact a communicative exchange, may encourage them to be mindful of their own attitudes. They may realise that having a curious, flexible, empathic, or at least a tolerant and respectful attitude can ease a communicative exchange significantly. Pupils who are intentionally mindful of attitudes and perspective, their own and others', are being strategic in their communicative endeavours (The Norwegian Directorate for Education and Training, 2013, p. 9, 2019, n.p.).

5.3   Understanding prejudice

When exploring alternate perspectives, understanding opposing or less palatable attitudes can be difficult. As an example, in modern society, prejudice is perceived as undesirable (Brislin, 2000, p. 214). Displaying understanding of and empathy towards prejudiced perspectives can be misconstrued as agreement; pupils may struggle with remaining neutrally objective for fear of being labelled as racists themselves. Pupils must realise that respect and tolerance towards a person do not require nor imply acceptance of their actions (Barrett et al., 2014, p. 17).

I, robot (Proyas, 2004) focuses upon the perspective of a paradoxically racist hero, which can help deconstruct the belief that prejudice is interchangeable with evil. As pupils analyse the source behind Spooner's racism, they may gain better insight into similar real-world prejudices that occur during certain historical and contemporary events (The Norwegian Directorate for Education and Training, 2013, p. 9, 2019, n.p.). Firstly, within the setting, all humans perceive robots as convenient machinery instead of as sentient beings (see scenes 1-2C). Prejudice commonly serves as a utilitarian function (Brislin, 2000, p. 210); diminishing an outsider social/cultural group rights or values serves as justification for why the group deserves to be subjugated and exploited by the prejudice culture (e.g. slavery). Secondly, it is

revealed that robots supplanted human labourers, including Spooner's father (undescribed scene, Proyas, 2004, 00:13:58-00:14:29). Economic conflict is a typical source of contention between social/cultural groups (Brislin, 2000, p. 215), commonly arising when natives perceive foreigners to be economic threats or burdens (e.g. immigrants, refugees). Lastly, during an accident a robot chose to rescue Spooner, based upon probability calculations, resulting in a child's death (undescribed scene, Proyas, 2004, 01:02:44-01:06:52). To alleviate his survivor's guilt, Spooner blames the robot for his survival, reasoning that all robots are morally repugnant for not sharing the same values as him. Similarly, pupils analysing *Star Trek* (Abrams, 2009) may notice that the prejudice the Vulcan youths' and VSA minster's express against humans and/or biracial Vulcans are possible attempts to sooth jealousy and offended pride (see scene 1-2A). Prejudice is commonly used as a shield (Brislin, 2000, p. 211), either to mask personal deficiencies by shifting the blame from oneself or to obtain a sense of moral superiority by elevating personal values and denigrating opposing culture's values (e.g. white supremacy, religious persecution). By gaining insight into the purpose behind prejudice, pupils gain a better understanding of their own and others' prejudiced perspectives. Insight enables pupils to form better strategies for navigating intercultural encounters. In addition, knowledge of how prejudice occurs allows deeper insight of the real-world events (e.g. apartheid, WWII).

There is a correlation between prejudice and negative stereotypes (Brislin, 2000, p. 209). In *Star Trek* (Abrams, 2009), Vulcans believe all humans are emotionally volatile, therefore biracial children are inferior to full-Vulcans. Yet the Vulcans' human stereotype is incorrect; while most depicted humans are more emotionally expressive than Vulcans, they are not excessively so (e.g. Amanda, Starfleet crew). Of equal note, both humans and Spock believe in the emotionless Vulcan stereotype. However, throughout scenes 1-3A, pupils assimilate through Vulcan lore and observation of several full-Vulcans that the stereotype is inaccurate; Vulcans are emotionally repressed not void of emotion. In *I, robot* (Proyas, 2004), Spooner dislikes robots because he believes in a negative robot stereotype. In scene 1D, pupils can observe how Sonny respectfully corrects or counters, through both dialogue and actions, each of Spooner's preconceived beliefs. Throughout the film, each further encounter with robots continues to decimate Spooner's old views. The best approach to overcoming prejudice is to patiently and respectfully disassemble any faulty information that the prejudice may be founded upon. In addition, becoming more cognisant of the potential misconceptions relying upon an inaccurate stereotype can cause, will improve pupils' ability to communicate

effectively (The Norwegian Directorate for Education and Training, 2013, p. 9, 2019, n.p.). By only relying provisionally upon stereotypes, continuously adjusting them as new or more accurate information becomes available, pupils develop their intercultural competence.

5.4   Through a reflection, the real world

At some point pupils need to make the connection from fiction to reality, from theory to practical application. By analysing *Star Trek* (Abrams, 2009) and *I, robot* (Proyas, 2004) scenes, pupils will acquire cultural information about Vulcans and robots. While analysing Vulcan and robot cultures provide pupils with practical experience in honing various intercultural skills, acquiring insight into a fictional culture may not seem to have practical applications to the real world. Exploring fictional cultures can circumvent preconceived attitudes and behaviours associated with real cultures (Lim et al., 2011, p. 224), but it may also have the added benefit of negating pupils' fear of making "politically incorrect" observations. Yet science fiction authors commonly base fictional cultures upon real-world cultures, as noted in the theory section (Part 2.2.3). Using fictional cultures to familiarise pupils with their real-world counterparts invites pupils to further hone their skills, in order to connect the dots between fiction and reality, by investigating, identifying and comparing societies, contemporary topics of prejudice, cultural stereotypes, and biracialism, and both contemporary and historical events (The Norwegian Directorate for Education and Training, 2013, p. 9, 2019, n.p.).

The aim is for the pupils themselves to investigate and identify the real-world counterpart cultures within the ESL classroom. Therefore, this thesis will lastly, yet only peripherally, speculate upon who Vulcans and robots are reflections of. Pupils analysing *Star Trek* (Abrams, 2009) may note that Vulcan culture shares several cursory similarities with stereotypical Middle Eastern cultures: architecture suitable for desert climate and geography, desert apparel, tradition-oriented values, and filial piety. Both Vulcans and Middle Eastern cultures are heavily influenced by their world views: logic versus faith. While favouring opposing philosophical doctrines (e.g. science versus religion), Vulcans congregating in the cathedral-like the Vulcan Science Academy, which is a distorted reflection of the various grand Muslim mosques found throughout the Middle East. On the other hand, pupils attempting to identify the real-world counterparts of robots in *I, robot* (Proyas, 2004), may struggle if they assume robots are a straight-up reflection of a real-world culture. However, if pupils consider that robots may be a compound allegory of several minority groups, they may realise that robots occupy the same roles as historical African slaves, while also tangentially

mirroring the same prejudice and difficulties persons of colour, immigrants, and refugees commonly encounter during current and past eras (in both the USA and Europe).

6   Sum-up and conclusion

This thesis set forth to explore to what extent the science fiction genre may be used to promote intercultural competence in the ESL classroom. However, before this could be done, one needed to address relevant theory related to intercultural competence and appropriate teaching materials: the five components of intercultural competence, the three categories of culture, the many communicative dimensions, the four multicultural literature thematic types, and the three multicultural literature considerations. Together, these formed the framework for what materials would be chosen, and what data would be collected and analysed. However, this theoretical framework is also key information, broken down into manageable chunks, that clarifies to English teachers why intercultural competence is vital to the national English subject. It can also function as the foundation, from which teachers may formulate their own interculturally-focused English lessons.

There are many benefits to expanding what genres are traditionally used within a classroom setting. When choosing between multicultural literature and science fiction, the latter genre offers theoretically more benefits and less drawbacks than the former. Science fiction is an extensive genre, appreciated by many individuals of both genders, and a favoured medium to provide societal critiques and explore contemporary topics; three facts that make science fiction both a pragmatic and desirable choice when considering materials for use in the classroom. Expanding one's intercultural competence through exploring fictional cultures can circumnavigate issues which can crop up when analysing multicultural literature (e.g. questions of authenticity, preconceptions based upon cultural stereotypes, fear of participating). Learning about aliens and robots may seem like a fun, yet academically pointless endeavour. However, fictional cultures draw on real-world cultures. Therefore, if science fiction can better motivate or encourage pupils to further their intercultural competence, it is the more desirable material to use. A skill learnt is a skill learnt, no matter the source.

When analysing scene extracts from *Star Trek* (Abrams, 2009) and *I, robot* (Proyas, 2004), this thesis shows that the right science fiction text offers ample examples of the presence, and effects, of culture upon intercultural encounters, and the consequences of an absence, or presence, of intercultural competence. By building upon the collected data and analysis, this

thesis suggests a sample of venues for how to fulfil the national English curriculum aims while exploring specific aspects of culture or intercultural competence. Immersion into Vulcan and robot cultures allows pupils to glimpse the extent to which culture affects perspective and communication. It also opens for comparisons between real and imagined cultures, to expand upon pupils' cultural knowledge, insight, and communicative strategies. Spock's and Sonny's struggles with both identity and prejudice are contemporary topics relevant to modern youths. Pupils from marginalised groups may recognise themselves in the characters' struggles, whilst mainstream culture pupils gain an insider's perspective to the difficulties marginalised groups face. The many clashes between Kirk and Spock demonstrate to pupils how important understanding one another, including how culture impacts interactions, is for communication. Their interactions contextualise to pupils why intercultural competence and developing communicative strategies must be part of language learning. Pupils observing Spooner's interactions with robots may become more aware of attitudes, their effects upon people and the environment. Vulcans and robots alike challenge stereotypes by exemplifying how a stereotype can be erroneous and too basic. Even when information is factually correct, members of the same culture express or interpret their culture differently, which highlights to pupils why they need to continuously question and adjust their knowledge.

In conclusion, in this thesis I have confirmed that science fiction is a genre that has a lot to offer to interculturally-focused English teachers and their pupils. Working with science fiction, within the frame of an interculturally-focused English lesson, is perfectly compatible, and even complementary, with the national English curriculum. A well-chosen science fiction text contains countless intercultural encounters to explore and analyse. The genre offers a fun yet innocuous means for pupils to develop their intercultural competence, practicing their observation and analytical skills, until they are ready for the next stage: practical application in the real world. In the real world, pupils will encounter people that do not speak their language, do not share the same cultural behaviours or traditions, and may have a completely opposing worldview. Therefore, nurturing pupils into becoming adept navigators of intercultural encounters is the best gift an English teacher can provide.

In short, inviting aliens and robots into your English classroom may be the most rewarding adventure you and your pupils' share together.

Bibliography

Abrams, J. J. (Director). (2009). *Star Trek* [Narrative film]. USA: Paramount Home
   Entertainment.

Applegate, K. A. (1996). *Animorphs: The Invasion*. New York: Scholastic.

Barrett, M., Byram, M., Lázár, I., Mompoint-Gaillard, P., & Philippou, S. (2014). *Developing*
   intercultural competence through education (J. Huber & C. Reynolds, Eds.).
   Strasbourg: Council of Europe.

Bista, K. (2012). Multicultural Literature for Children and Young Adults. *The Educational*
   Forum, *76*(3), 317-325. https://doi.org/10.1080/00131725.2012.682203

Blomkamp, N. (Director). (2009). *District 9* [Narrative film]. New Zealand/USA/South
   Africa: TriStar Pictures.

Brislin, R. (2000). *Understanding culture's influence on behaviour* (3. ed). Fort Worth:
   Wadsworth.

Burton, T. (Director). (2001). *Planet Of The Apes* [Narrative film]. USA: 20th Century Fox.

Byram, M. (1997). *Teaching and assessing intercultural communicative competence*. UK:
   Multilingual Matters.

Cameron, J. (Director). (2009). *Avatar* [Narrative film]. USA: Twentieth Century Fox Home
   Entertainment.

Chao, T.-C. (2013). A diary study of university EFL learners' intercultural learning through
   foreign films. *Language, Culture and Curriculum*, *26*(3), 247-265.
   https://doi.org/10.1080/07908318.2013.833936

Chiang, T. (1998). Story of your life. In *Starlight 2* (pp. 257-313). New York: Tor

Council of Europe. (2001). *Common European Framework for Reference of Languages:*
   Learning, teaching, assessment (CEFR). Retrieved from
   http://www.coe.int/t/dg4/linguistic/Cadre1_en.asp

Csicsery-Ronay Jr., I. (2011). *The Seven Beauties of Science Fiction*. Retrieved from
   http://site.ebrary.com/lib/alltitles/docDetail.action?docID=10500362

Dypedahl, M. (2007). *Interkulturell læring og fremmespråksundervisning* (online-versjon).
   Halden: Fremmedspråksenteret.

Glans, M. (2016, August 10). Humanisme i verdensrommet. Retrieved 1 February 2017, from
   Aftenposten website: https://www.aftenposten.no/article/ap-pKAnw.html

Hall, E. T. (1991). Context and Meaning. In L. A. Samovar & R. E. Porter, *Intercultural Communication: A Reader* (6. ed., pp. 46-55). Belmont, California: Wadsworth Publishing Company.

Harris-Fain, D. (2005). *Understanding contemporary American science fiction: The Age of Maturity, 1970-2000*. South Carolina: The University of South Carolina Press.

Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and Organisations: Software of the mind (3. Ed)*. (3. ed). USA: McGraw-Hill Books.

Huxley, A., & Atwood, M. (2008). *Brave New World* [Kindle]. London: Vintage Digital. Retrieved from http://www.amazon.com

Keyes, D. (2005). Flowers for Algernon. In R. Silverberg (Ed.), *The Science Fiction Hall of Fame, Volume One, 1929-1964* (Reprint ed (original print 1970), pp. 502-527). New York: Orb Books.

Kim, M.-S., & Kim, E.-J. (2013). Humanoid robots as "The Cultural Other": Are we able to love our creations? *AI & SOCIETY, 28*(3), 309-318. https://doi.org/10.1007/s00146-012-0397-z

Kowal, M. R. (2009, March 24). Evil Robot Monkey. Retrieved 11 October 2014, from Mary Robinette Kowal website: http://maryrobinettekowal.com/journal/evil-robot-monkey/

Lim, M. Y., Leichtenstern, K., Kriegel, M., Enz, S., Aylett, R., Vannini, N., Rizzo, P. (2011). Technology-enhanced role-play for social and emotional learning context – Intercultural empathy. *Entertainment Computing, 2*(4), 223-231. https://doi.org/10.1016/j.entcom.2011.02.004

Lucas, G. (Director). (1999). *Star Wars: Episode I - The Phantom Menace* [Narrative film]. USA: 20th Century Fox.

Lund, R. E. (2008). Intercultural competence – An aim for the teaching of English in Norway? *Acta Didactica Norge, 2*(1), 1-16.

Meyer, S. (2008). *The Host*. London: Sphere.

Mitchel, D. (2003). Multicultural and International Literature. In *Children's Literature: An Invitation to the World* (pp. 198-225). Boston: Pearson Education.

Niccol, A. (Director). (1997). *Gattaca* [Narrative film]. USA: Jersey Films/Columbia Pictures.

Obeso, D. (2014). How Multicultural Is Your Multiverse? *Publishers Weekly, 261*(40), 24-31.

Pearson, M. E. (2015). *The Adoration of Jenna Fox* [Kindle]. NY: Henry Holt and Co. Retrieved from http://www.amazon.com

Pegrum, M. (2008). Film, Culture and Identity: Critical Intercultural Literacies for the Language Classroom. *Language and Intercultural Communication*, *8*(2), 136-154. https://doi.org/10.1080/14708470802271073

Proyas, A. (Director). (2004). *I, Robot* [Narrative film]. USA: Twentieth Century Fox.

Risager, K. (2000). The teacher's intercultural competence. *Sprogforum*, *6*(18), 14-20.

Samovar, L. A. ., Porter, R. E., McDaniel, E. R., & Roy, C. S. (2013). *Communication between cultures* (8th ed., international ed.). China: Wadsworth Cengage Learning.

Spielberg, S. (Director). (2001). *A.I. - Artificial Intelligence* [Narrative film]. USA: DreamWorks.

Sturm, J. L. (2012). Using Film in the L2 Classroom: A Graduate Course in Film Pedagogy. *Foreign Language Annals*, *45*(2), 246-259. https://doi.org/10.1111/j.1944-9720.2012.01187.x

The Norwegian Directorate for Education and Training. (2013). English subject curriculum. Retrieved 8 February 2016, from The Norwegian Directorate for Education and Training website: http://www.udir.no/kl06/ENG1-03/Hele?lplang=eng

The Norwegian Directorate for Education and Training. (2019). Læreplan i engelsk. Retrieved 10 April 2019, from The Norwegian Directorate for Education and Training website: https://hoering.udir.no/Hoering/v2/338?notatId=674

Wells, H. G. (2012). *The Time Machine* [Kindle]. UK: Penguin. Retrieved from http://www.amazon.com

Wikipedia. (2017a, October 27). United Federation of Planets. Retrieved 8 November 2017, from https://en.wikipedia.org/w/index.php?title=United_Federation_of_Planets&oldid=807436902

Wikipedia. (2017b, November 8). Star Trek. Retrieved 8 November 2017, from https://en.wikipedia.org/w/index.php?title=Star_Trek&oldid=809334939

Appendix A: Communicative dimensions

The below list presents an assortment of communicative dimensions (Poyatas qtd. in Byram, 1997, pp. 13-14; Samovar et al., 2013, pp. 262-284):

- o **Language**, the linguistic aspect that concerns both the physical shaping and pronunciation a foreign language to correctly enunciate it, and the acquiring and expanding a linguistic database of words and grammatical rules.
    - Phonetics/phonemics – e.g. replacing /v/ with /w/
    - Morphology – e.g. struggling to pronounce /v/
    - Syntax – e.g. prejudice slurs
    - Vocabulary – e.g. imperious and subordinate language
- o **Paralanguage**, the modifiers for verbal communication or vocalised non-verbal sounds that can indicate personal background, status, emotional state, modify or imply sub-textual meanings.
    - Vocal qualities – e.g. robotic accent
    - Vocal segregates – e.g. "hmm"
    - Vocal characteristics – e.g. whispering
- o **Kinesics**, the forms of body movement that function as or accentuate verbal communication, or can provide interpretive indicators of emotional states, relationships, or status.
    - Posture – e.g. rigid posture
    - Gestures – e.g. banging hands against a surface
    - Touch – e.g. sympathetic hand stroke
    - Facial Expression – e.g. winking
    - Eye contact between interlocutors – e.g. angry glare
    - Chemical/dermal body reactions – e.g. bruising
- o **Proxemics**, the power and/or relationship indicators that are expressed through the physical environment, such as architectural design and function, and/or spatial distance.
    - Personal space bubbles between interlocutors – e.g. invasion of space
    - Built or modified environments – e.g. desert dwellings
- o **Body- or object-adaptors**, which serve as personal body modifiers that accentuate or signify social groups, emotional states, personal or social status.

- Appearance – e.g. synthetic body
- Clothes – e.g. colour-coded uniforms
- Cosmetics – e.g. police badge

Appendix B: The 16 science fiction texts considered

The sixteen texts that were considered are as follows:

- **Films:** *A.I. Artificial Intelligence* (Spielberg, 2001), *Avatar* (Cameron, 2009), *District 9* (Blomkamp, 2009), *Gattaca* (Niccol, 1997), *I, Robot* (Proyas, 2004), *Planet of the Apes* (Burton, 2001), *Star Trek* (Abrams, 2009) from the Star Trek franchise, *Star Wars Episode I – The Phantom Menace* (Lucas, 1999) from the Star Wars franchise.
- **Novels, novellas, and short stories:** *Brave New World* (Huxley & Atwood, 2008), *Evil Robot Monkey* (Kowal, 2009), *Flowers for Algernon* (Keyes, 2005), *Story of Your Life* (Chiang, 1998), *The Adoration of Jenna Fox* (Pearson, 2015) from the Jenna Fox Chronicles, *The Host* (Meyer, 2008), *Animorphs: The Invasion* (Applegate, 1996), *The Time Machine* (Wells, 2012).

Appendix C: *Star Trek* data

C.1 Film scene character guide

Name	Film scenes	Brief outline
Spock	1-3A, 1-3B	Half-human, half-Vulcan male, a Starfleet commander and instructor, USS Enterprises' First Officer and Chief Science Officer
Vulcan Trio	1A	Three unnamed Vulcan youths, Spock's tormentors during his childhood.
Sarek	1-3A, 2B	Spock's Vulcan father, an ex-diplomat of Earth and currently a minister of the VSA council
Amanda Grayson	2A	Spock's human mother
VSA council	2A	A council of 5 male and 2 female Vulcan elders, the governing ministers of the VSA
VSA minister	2A	Unnamed male elder Vulcan, the leader of the VSA council
James T. Kirk	1-3B	Human Caucasian male from Iowa, a Starfleet cadet and USS Enterprise stowaway
Leonard "Bones" McCoy	1-3B	Human Caucasian male from Georgia, Kirk's sardonic best friend, a Starfleet medical officer
Hikaru Sulu	1-3B	Human coloured male of Japanese descendance, a Starfleet cadet and the USS Enterprises' helmsman
Pavel Chekov	1-3B	Human Caucasian male from Russia, a teenage Starfleet cadet and ensign of the USS Enterprise, and a prodigious mathematician
Nyota Uhura	1-3B	Human coloured female of African descendance, Spock's love-interest, a Starfleet cadet and USS Enterprises' Chief Communications Officer replacement
Montgomery "Scotty" Scott	2-3B	Human Caucasian male from Scotland, exiled Starfleet officer and eventual USS Enterprises' Chief Engineer replacement

C.2 Film scene analysis tables

Table 1A		
Communicative Dimensions	**Dialogue**	*Social:* Control/repress emotions, loss of composure is undesirable, defensive/respectful of parents *Subjective:* Interspecies marriage is detrimental/logical, control obtained through logic, filial piety
	Language	*Social:* Objective, precise and polysyllabic vocabulary, scientific and concise jargon
	Para-language	*Social:* Unemotional vocal tones
	Kinesics	*Social:* Rigid/correct body posture, emotionless facial expressions, touch-avoidance
	Proxemics	*Material:* Elevated traffic ramps, engineered flying vehicles, sand-coloured stalagmite/stalactite-shaped buildings, strategic placement of buildings against/upon cliffs, individual learning-pods, tutor-A.I.s, holographic blackboards *Social:* Maintain inviable personal space
	Body/ Object-adaptors	*Material:* Pointed ears, slanted eyebrows, Caucasian skin tones, straight hair and short hairstyles, dark robes or tunics.
Intercultural Competence	**Absence**	*Vulcan trio:* Expressing intolerant and inflexible racist attitudes, relying upon negative human stereotyping in respect of emotional control *Sarek:* Not accounting for Spock's dual-nature during his logic/emotionality-lecture
	Presence	*Spock:* Predicting the Vulcan trio's intentions, unafraid to question Sarek's Vulcan principles *Sarek:* Knowledge of and explaining in layman-terms how and why logic and control are important to Vulcans, being open to marrying outside his species

Table 2A		
Communicative Dimensions	**Dialogue**	*Social:* Purging emotions/Kolinahr, defensive of parents, desire for parental approval, defiance of tradition perceived as emotional gratification *Subjective:* Filial piety, value logic and pragmatism, intellectual merit trumps racial purity, non-pure Vulcans are disadvantaged
	Language	*Social:* Objective, precise and polysyllabic vocabulary, scientific and concise jargon, "live long and prosper" cultural salutation
	Para-language	*Social:* Unemotional vocal tones, increasingly brusque/sharp vocal tones when hostile
	Kinesics	*Social:* Rigid/correct body posture, emotionless facial expressions
	Proxemics	*Material:* Vulcan Science Academy's light-coloured walls and beams, large cathedral-like windows and off-screen tolling bell, elevated council podium, background sand-coloured stalagmite/stalactite-shaped buildings.
	Body/ Object-adaptors	*Material:* Pointed ears, slanted eyebrows, Caucasian skin tones, dark, straight hair and short hairstyles, female hoods and shawls, sleek earthen-coloured vestments.
Intercul tural	**Absence**	*VSA minister:* Perceiving humans as inferior
	Presence	*VSA minister:* Willing to accept biracial student *Spock:* Interpreting and evaluating prejudice message, perceiving that he cannot escape Vulcan prejudice in the VSA

Table 3A		
Communicative Dimensions	**Dialogue**	*Social:* Desire to not disappoint parent *Subjective:* Filial piety, emotional control
	Language	*Social:* Objective, precise and polysyllabic vocabulary, scientific and concise jargon
	Para-language	*Social:* Unemotional vocal tones, elevated vocal tones and intonation during self-flagellation, hushed vocal tones and emphasised intonation on key words during comforting
	Kinesics	*Social:* Rigid/correct body posture, emotionless facial expressions, shamed eye-contact avoidance, confessional direct eye-contact, touch-avoidance
	Proxemics	*Social:* Increased intimacy by closing the distance
	Body/ Object-adaptors	*Material:* Pointed ears, slanted eyebrows, Caucasian skin tones, dark, straight hair and short hairstyles, sleek earthen-coloured vestments.
Intercultural Competence	**Absence**	*Spock:* Internalised misinformation about Vulcan emotionality
	Presence	*Sarek:* Understanding Spock's struggle is caused by a misunderstanding about Vulcan emotional repression versus absence, quoting Spock's mother to resolve Spock's emotional/bicultural conflict, correcting Spock's misinformation that Vulcans do not feel or act upon emotions by expressing his emotions towards his wife and son. *Spock:* Acknowledging his emotional confusion, expanding/adjusting his understanding about Vulcan emotionality based upon Sarek's input

Communicative Dimensions	**Dialogue**	*Human:* Emotional/passionate statements *Starfleet*: Military titles/designations, regulations dictating behaviour and actions, established chain-of-command and obedience towards it *Vulcan:* Logical/objective statements
	Language	*Human:* Relaxed and informal language *Starfleet*: Professional language, navy, engineering, and outer space jargon, use of navy designations instead of names during conversation *Vulcan:* Objective, precise and polysyllabic vocabulary, scientific and concise jargon
	Para-language	*Human:* American English and Russian accents, broad range of tones that fluctuate according to emotion, increasing volume as passion/aggression increases *Starfleet*: Respectful/subservient tones towards superior *Vulcan:* Unemotional and calm vocal tones, more severe tone as annoyance increases
	Kinesics	*Human:* Extensive use of hand/arm motions and gestures to supplement dialogue or signal deep thought, emotional facial expressions, frowning, glaring and rolling eye-motions to signal emotional state. *Starfleet*: Alert/attentive body postures, eye-contact aimed at captain during communicative exchanges unless interacting with their workstation *Vulcan:* Rigid/correct body posture, control of arms folded behind back/crossed in front, emotionless facial expression, touch-avoidance
	Proxemics	*Human:* Aggressive encroachment of personal space *Starfleet*: Allocated work-terminals arranged around the captain's chair, captain's chair *Vulcan:* Maintain personal space
	Body/ Object-adaptors	*Human:* Round ears, wide range of skin tones, hair colour and lengths *Starfleet*: Starfleet badges, colour-coded uniforms *Vulcan:* Pointed ears, slanted eyebrows, Caucasian skin tone, dark, straight hair and short hairstyle
Intercultural Competence	**Absence**	*Kirk:* Unwilling to negotiate/respect Spock's opinion, relying upon unobjective/emotional pleas and arguments with a Vulcan, invading a Vulcan's personal space, disrupting order on the bridge through his undisciplined behaviour, referring to Spock by name instead of Starfleet designation, displaying a loss of emotional composure through shouting, use of threatening body language and by assaulting Spock and crewmembers, wearing civilian apparel on a Starfleet vessel, sitting in the captain's chair without authority, using flippant language in a professional setting, suggesting that Starfleet regulations and Pike's last orders be ignored in favour of his personal desires, attempting to countermand and usurp the authority of the acting Starfleet captain
	Presence	*McCoy:* Reminds Kirk about Spock's status as captain *Spock:* Tolerating Kirk's emotional outbursts, allowing Kirk to state his arguments

Table 2B		
Communicative Dimensions	**Dialogue**	*Human:* Lack of empathy/emotions perceived as inhuman, value emotions/emotional attachments, flexible dynamic perspective *Starfleet*: Military titles/designations, established chain-of-command and obedience towards it, military discipline and court martial, reliance upon protocols and procedures *Vulcan:* Control important, feel emotions yet expressing emotion is a loss of control, inability to adapt to irrational behaviour, reliance upon logic/objective rationale
	Language	*Starfleet*: Professional language, navy, engineering, and outer space jargon, use of navy designations instead of names during conversation *Vulcan:* Precise and polysyllabic vocabulary
	Para-language	*Human:* American English and Gaelic English accents, broad range of tones that fluctuate according to emotion, hushed volume during confessional queries, raised volume during confrontational accusations *Starfleet*: Respectful/subservient tones towards superior *Vulcan:* Rapid and terse vocal tones while frustrated/distressed, howling during loss of composure
	Kinesics	*Human:* Emotional facial expressions, aggressive/mocking posturing. *Starfleet*: Alert/attentive body postures, hesitant/frozen motions during situations outside protocol *Vulcan:* Rigid/correct body posture, quicker/abrupt body motions when frustrated, punching/chocking instigator of emotional distress
	Proxemics	*Human:* Display aggression through encroachment of space *Starfleet*: Allocated work-terminals arranged around the captain's chair, captain's chair *Vulcan:* Inviable personal space outside acts of aggression
	Body/ Object-adaptors	*Human:* Round ears, wide range of skin tones, hair colour and lengths *Starfleet*: Starfleet badges, colour-coded uniforms *Vulcan:* Pointed ears, slanted eyebrows, Caucasian skin tone, dark, straight hair and short hairstyle, brown robes
Intercultural Competence	**Absence**	*Crew:* Not intervening/observing shocked when confronted with a superior assaulting a subordinate *Spock:* Repeating failed threats/not adjusting his approach when confronted with insubordinate crew, inability to adapt to perceived irrational behaviour, denial/loss of composure when confronted with either insubordination and emotionally charged accusations, punching/chocking instigator of emotional distress
	Presence	*Kirk:* Referring to Spock by name instead of Starfleet designation, invading a Vulcan's personal space, behaving intentionally insubordinate and mocking a Starfleet officer's inability to enforce his authority, intentionally invoking a Vulcan's emotional memories, mocking and questioning a Vulcan's emotional control, sitting in the captain's chair to assume/enforce his authority

Table 3B		
Communicative Dimensions	**Dialogue**	*Human:* Value emotions/emotional attachments *Starfleet:* Military titles/designations, established chain-of-command and obedience towards it, reliance upon protocols *Vulcan:* Value logic, objective/rational perspective
	Language	*Human:* Relaxed and informal language *Starfleet:* Professional language, navy, engineering, and outer space jargon, use of navy designations instead of names during conversation *Vulcan:* Objective, precise and polysyllabic vocabulary, scientific and concise jargon
	Para-language	*Human:* American English, Gaelic English, and Russian accents, broad range of tones that fluctuate according to emotion, brief huff of laughter to express amusement/satisfaction *Starfleet:* Respectful tones towards superior *Vulcan:* Calm and slightly rueful vocal tones
	Kinesics	*Human:* Emotional facial expressions, nodding and shaking head gestures, slapping shoulder for attention or acknowledgment *Starfleet:* Alert/attentive body postures, eye-contact aimed at captain/peers during communicative exchanges unless interacting with a workstation *Vulcan:* Correct body posture, subtly earnest facial expression, faint rueful smile
	Proxemics	*Human:* Minimising personal space to display trust or intimacy *Starfleet:* Work-terminals arranged around the captain's chair, captain's chair, congregating by a glass-computer panel relevant to topic discussion *Vulcan:* Maintain personal space
	Body/ Object-adaptors	*Human:* Round ears, wide range of skin tones, hair colour and lengths *Starfleet:* Starfleet badges, colour-coded uniforms *Vulcan:* Pointed ears, slanted eyebrows, Caucasian skin tone, dark, straight hair and short hairstyle
Intercultural Competence	**Absence**	*N/A*
	Presence	*Kirk:* Referring to Spock respectfully as Mr. Spock, willingness to negotiate with Spock concerning how to proceed with the rescue operation *Spock:* Supporting Chekov's calculations to demonstrate, acquiescing to new commander by expanding upon/improving rescue plan, providing/manipulating insight into how a Vulcan can maximize the odds of success for Kirk's rescue objective to ensure his own inclusion, implied knowledge about Romulans and willingness to share, a Vulcan physically displaying emotion by smiling, a Vulcan expressing affectionate attachment to his human mother and insinuating emotional attachment to planet Earth, resisting arguing with Kirk's breaking of Starfleet regulations, accepting Kirk's touch without comment despite Vulcan distaste for touch

Appendix D: *I, robot* data

D.1 Film scene character guide

Name	Film scenes	Brief outline
Del Spooner	1-2C, 1-2D	An African-American coloured human/cyborg male, a police detective of the Chicago Police Department
Red robot	1C	A robot
Asthmatic woman	1C	An African-American coloured human woman, owner of the red robot
Susan Calvin	2C, 2D	A Caucasian human woman, a robot psychologist employed at the USR
VIKI: Virtual Interactive Kinetic Intelligence	2D	An advanced super A.I. created by Lanning, operator of all USR systems, designer of Chicago's Protective Systems
Sonny	2C, 1-2D	A unique SN-5 model robot, Lanning's final creation
John Bergin	1D	An African-American coloured human male, Spooner's friend and superior, the police lieutenant of the Chicago Police Department
Lawrence Robertson	1-2D	The CEO of the USR
Alfred Lanning	2D	An elderly Caucasian human male, the deceased murder-victim, Spooner's friend, author of the three laws of robotics and creator of modern robots, lead researcher at USR

D.2 Film scene analysis tables

Table 1C		
Communicative Dimensions	**Dialogue**	*Human:* Robots are obedient servants/personal tools *Robot*: Perform errands for humans, apologetic towards humans for indirectly inflicting mental harm/causing misunderstanding, implied to be unable of malicious acts against humans
	Language	*Human:* Casual/professional language, soothing/authoritative phrases when attempting to reassure or impose order, insulting/derisive vocabulary used when hostile *Robot*: Formal/polite language, apologetic/subservient vocabulary and phrasings
	Para-language	*Human:* Range of tones that fluctuate according to emotion, commanding tone, shocked/curious exclamations, hushed murmurs, wheezing/breathless gasps, and anxious/uncertain stuttering *Robot*: Synthetic/mechanical male voice, helpful/submissive tone
	Kinesics	*Human:* Expressive faces, sweeping/aggressive hand and head motions when angered, troubled frowns when uncomfortable, head shakes and uneasy/searching glances when apprehensive, anxious/uncertain shifting from foot to foot *Robot*: Static facial expression
	Proxemics	*Human:* Casual and relaxed mingling with robots, crowding together when curious
	Body/ Object-adaptors	*Human:* Organic flesh bodies, variety of skin colours, male and female genders, diverse western casual and business clothing, police badge authority icon, inhaler apparatus asthma icon *Robot*: Synthetic mechanical bodies, diversely coloured metallic plating, mannequin-like cylindrical metal limbs and ball-joints, simplistic inanimate face, physically nongendered, unclothed
Int erc	**Absence**	*Spooner:* Interpreting the robot's actions as theft
	Presence	N/A

Table 2C		
Communicative Dimensions	**Dialogue**	*Human:* Three laws of robotics perceived as immutable/breakable, robots are animated objects not sentient individuals *Robot*: The three laws of robotics: robots cannot harm humans, must obey human commands, and must protect themselves, prioritised in numerical order.
	Language	*Human:* Casual/formal language according social class, police/psychologist profession jargon *Robot*: A.I. subservient language
	Para-language	*Human:* Range of tones that fluctuate according to emotion *Robot*: Synthetic/mechanical female A.I. voice
	Kinesics	*Human:* Expressive faces *Robot*: Animated simplistic face
	Proxemics	*Human:* Encroachment of personal space for protection
	Body/ Object-adaptors	*Human:* Organic flesh bodies, dark and light skin colours, male and female genders, western casual clothing and formal suit, firearms as unvoiced threat *Robot*: Robot synthetic mechanical body, opaque polymer plating, human-like metallic skeleton structure, hydraulic pistons and tubing musculature and joints, A.I. disembodied form, physically nongendered, unclothed
Intercultural Competence	**Absence**	*Calvin:* Disregarding robot displaying disobedience, walking up to a possibly malfunctioning robot
	Presence	*Robot*: Acquire information about Calvin's perception of robots, adjust behaviour to manipulate/trick Calvin *Spooner:* Interpret robot as behaving abnormally, assessing possible threat, and employing reasonable cautious behaviour when confronted with possible hostile unknown/malfunctioning robot

Table 1D		
Communicative Dimensions	**Dialogue**	_Social_: Curious of other cultures/behaviours, can be taught/simulate/feel emotions, can dream, designate loved ones, requests comfort/reassurance _Subjective_: Behaviour, morals and values are influenced/governed by the three laws of robotic, angry/anxious/distressed at causing harm to a loved one, morally obliged/desire to obey/grant favours to loved ones, defends/enforces individuality/the right to have a name, protecting species/correcting inaccuracies about robots, conditional limitations of who the three laws applies to alters human-robot relationship to equal status/non-submissive attitude
	Language	_Social_: Preference for intimate designations such as individual names and familial relationship terminology
	Para-language	_Material:_ Camera-shutter and zooming sound implies ocular cameras _Social_: Synthetic/slightly tinny male voice, increased volume when agitated, tremulous metallic echo when anxious
	Kinesics	_Material:_ Indenting metal when hitting it signifies immense physical strength _Social_: Expressive facial features, widening/narrowing eyes, raised/frowning brows, emotive/expressive posture, curiously/defiantly facing downward/away, caressing picture, smacking the table
	Proxemics	_Social_: Minimising distance/leaning in closer to confide secrets/convey trust
	Body/ Object-adaptors	_Material:_ Robot synthetic mechanical body, opaque polymer plating, human-like metallic skeleton structure, hydraulic pistons and tubing musculature, tendons and joints, dynamic animatronic facial musculature, physically nongendered, unclothed
Intercultural Competence	**Absence**	_Spooner:_ Dehumanising/enforcing objectifying terminology, using racial slurs
	Presence	_Sonny_: Displaying open curiosity towards and willingness to seek clarification about human behaviour, interpreting Spooner's hostile attitude and adjusting his language to avoid antagonising him without compromising himself by referring to Lanning by his name instead of as father/designer, factually correcting inaccuracies about robot capabilities, rationalising/discrediting assumptions about robot vs human creative abilities, attempts to seek guidance from a human into gaining insight into his human father's motives and actions

Table 2D		
Communicative Dimensions	**Dialogue**	*Material*: Connected to the USR uplink/cyberspace *Social*: Ability to reprogram/control robots, control USR computer/technological systems, exert/threaten physical violence, lie or mislead *Subjective*: Transcend/distort the three laws of robotics, custodians of self-destructive humanity, submissive attitude altered to dominant/custodian attitude or equality, prioritise/favour logic/efficiency, controlling/governing humans will optimise humanity's survival, morally predisposed to not harm an individual or protect humanity
	Language	*Social*: Formal language, statistical-, efficiency-, and logistical-oriented jargon
	Para-language	*Social*: Synthetic/slightly tinny male voice for robots or female voice for A.I.s, emotionally expressive or unemotional/clinical vocal tones, emphasised intonation on key words when highlighting a point
	Kinesics	*Social*: Emotionally expressive or dispassionate facial features, red glowing light to indicate controlled robots
	Proxemics	N/A
	Body/ Object-adaptors	*Material:* Robot synthetic mechanical body or incorporeal body, opaque polymer plating or holographic monochrome pixilation, human-like metallic skeleton structure, human-like hydraulic pistons and tubing musculature, tendons and joints or glowing cubed holographic projection, dynamic animatronic facial musculature or indistinct facial silhouette, physically nongendered vs feminine facial curvature, unclothed
Intercultural Competence	**Absence**	*VIKI*: Lack of empathy, lack of understanding into human psyche concerning removal of freedom/autonomy, knowledge of/focus upon only negative human traits, clinically rationalise robot domination to an emotional prejudice human, reducing protecting humanity to a logistical enterprise
	Presence	*Sonny:* Acquire information about VIKI's perspective of the three laws of robotics, robots, and humans, adjust language and behaviour to manipulate/trick VIKI, use the pretext of subduing humans to unimpededly approach his companions, acquire a weapon, and secure/protect Calvin, apply his knowledge of human gestures to non-verbally communicate his true allegiance to Spooner *Spooner:* Deduce who the correct villainous robot/A.I. is, perceive how Lanning manipulated him through his robot prejudice to guide him to the correct conclusion, acknowledge that his robot prejudice affects his perception, correctly interpret Sonny's winking gesture, trusting a robot