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Table of Contents

Intercultural Education in Europe: The Bridge Teaching Values of Cultural Diversity Rudyk Iryna	pp. 1 - 6
Adapting Complex Time: 'Story of Your Life' (1998) and Arrival (2016) Lauren Molyneux-Dixon	pp. 7 - 18
The Republic of Heaven: A Return to Mother Earth in Philip Pullman's His Dark Materials Sunshine Williams	pp. 19 - 30
Soft Skills as a Tool for Interdisciplinary Teamwork of Product Designers Tomas Chochole	pp. 31 - 40
The Effects of Marketplaces on the Spatial Variability of the Urban Soundscape: A Multicase Study in the Department of Cauca (Colombia) Julián Grijalba	pp. 41 - 68
Synergistic Space Potentials: Technology, Humans and Responsive Materials in the Design Process Marcus Farr Andrea Macruz Alexandre Ulson	pp. 69 - 88
Heritage-Inspired Creativity for Textile Printed Pattern: A Case of Sukhothai Kamonsiri Wongmuek Prashya Piratrakul Nitipol Thararoop	рр. 89 - 98
Heritage Inspired Costumes for Thai Traditional Massage Business Prashya Piratrakul Kamonsiri Wongmuek Nitiphol Thararoop	pp. 99 - 114
Understanding the Mauritian Kitchen through Primary and Secondary Sources S.Ramsamy-Iranah S.Venkannah D. Gokulsing V. Pooneeth Y. Bhiwoo	рр. 115 - 130
Can Volunteering Choices Reflect Job Expectations? – Motivational Impact of Perceived Self-Sufficiency and Personal Religious Beliefs Matej Nakić Mirna Koričan Lajtman	
Goran Oblaković	pp. 131 - 138

A Comparative Analysis of Metaphors Constructing Danger and Force Dynamics in Buddhism Discourse	
Baramee Kheovichai	
Makoto Watanabe	
	120 152
Masako Wada	pp. 139 - 152
The Implementation of VR Technology in the Recoloring of the Historical	
Pharoanic Sites (Case Study On Khuwy's Tomb)	
Heba El Kamshoushy	pp. 153 - 164
World Order, Regime and Law of the U.S., UK, France and Europe	
	nn 165 170
Yoshihiro Nagata	pp. 165 - 178
Hemingway and Dos Passos: The 1930s	
Majed S. Al-Lehaibi	pp. 179 - 184
-	
Who is Oliver?	
Unexecuted Wills and Threatened Legal Rights in Oliver Twist	
Akiko Takei	pp. 185 - 192
A Cross-Cultural Analysis of Self-Examination in Shakespeare's Hamlet	
and Chinese Philosophy and Tragedy	102 200
Daoyu Shi	pp. 193 - 200

Intercultural Education in Europe: The Bridge Teaching Values of Cultural Diversity

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Abstract

The phenomenon of migration is not new in the history of humanity. Nevertheless, European countries are still facing difficulties when it comes to the integration of migrant children. In the present paper, intercultural education is seen as a solution to integrate and preserve migrant children's culture. Surprisingly, analysis of its theoretical approach revealed some significant practical weaknesses. As a result, this paper suggests that theoretical methods may not be enough to promote multicultural understanding based on equality, respect and diversity.

Keywords: Diversity, Intercultural Education, Identity, Cultural Values

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Introduction

The increasing number of young migrants in Europe has brought a necessity to provide a new educational system. Intercultural education has been seen by the Council of Europe and UNESCO as a solution to this issue. The educational approach has been thought not only with the intent to preserve the cultural heritage of migrant children but also to cross cultural borders, which have risen in a multicultural society.

Both institutions have also provided definitions of the new educational approach. According to UNESCO, intercultural education has the aim to promote and establish a dialogue between "*individuals and/or groups with different ethnic, cultural, religious, and linguistic backgrounds and heritage*" (Guidelines for Intercultural Education, 2007).

The Council of Europe in "T-KIT for Intercultural learning" defines intercultural education as

"[...] an educational approach that can lead to social transformation so that people from different cultural backgrounds can develop positive relations based on the values and principles of human rights and on seeing cultural differences as positive things".

Both guidelines describe the values and principles of this approach, but despite the T-KIT provides theoretical methods on teaching intercultural education, it does not provide a common practical solution, which may create difficulties on developing multicultural education. As a result, in some cases, instead of promoting awareness of the positive values, there could be a risk to reinforce cultural borders.

For this reason, the first part of the paper introduces four theoretical levels of intercultural teaching and skills. In the second part, theoretical methods are seen in practice by the comparison of polish and Italian intercultural approach. The aim of this comparison is to demonstrate how the socio-political situations of both countries may have influenced the development of this new educational process. As a result, this paper will show that four of the T- KIT's levels and definitions of intercultural education in Europe.

Literature Review

In the past intercultural approach was seen as an individual issue and was focused on cultural and individual identity. As a result, this limited approach had led to any long-changes. It was then believed that being in contact with people of a different cultural background would reduce stereotypes and injustice, but without a specific approach and certain conditions neither this idea provided positive changes (T-KIT, 2018).

Hopefully, the increasing number of migrants brought a necessity to analyze, understand and represent different cultures. Scholars such as Priscilla Rogers and Joo-Seng Tan (2008) Hall (1959; 1966), Hofstede (1980), Turner (1997), Schwartz (1999) had given an essential contribution to this phenomenon. Indeed, thanks to their studies the Council of Europe and UNESCO defined intercultural education.

Today, the intercultural educational guide of UNESCO states that this educational approach is thought to

"develop [e] an understanding of other people and an appreciation of interdependence in a spirit of respect for the values of pluralism, mutual understanding".

To promote these skills the Council of Europe developed four levels of intercultural activities.

The first level

"is based on simple activities mostly useful as starters to get people to begin thinking about intercultural learning".

The second level is

"designed to help people develop communication and group work skills, while at the same time stimulating their interest in issues related to culture and intercultural learning".

The third level is based on

"longer activities designed to develop a deeper understanding and insights into an issue."

The last, fourth level

"require good group work and discussion skills, concentration and cooperation from the participants [...]" (T-KIT, 2018).

The T-KIT's levels give a good definition and model of intercultural education. However, they can also be used singularly, which may not provide children with the right understanding of intercultural principles. The efficiency of the project becomes relevant especially when the number of migrant students in the country is high.

According to the United Nations Department of Economic and Social Affairs (UN/DESA), number of migrant aged 19 or under "*rose from 28.7 million in 1990 to 36 million in 2017*".

Among them, there are also unaccompanied and separated children. As data reported, the migrant children settle mostly in low and middle-income countries rather than in high-income countries.

Indeed, the percentage of migrant children under 19 years old was 17.8% in Poland, while 16.8% in Italy (UN DESA. 2017). Nevertheless, Poland developed an efficient intercultural approach, while Italy struggled. Below the comparison of both intercultural approaches are reported.

The primary school attended by Chechen children in Białystok (Poland) had seen the intercultural approach as a combination of theory and practice.

"121 pupils took part in the pilot program. The groups were very diversified. Apart from interpersonal differences, there were also biological, national, and religious differences" (Młynarczuk-Sokołowska A., 2013).

The intercultural project had started with theoretical lessons. Once intercultural principles through lessons were introduced, students joined culinary and dance workshops. After the course, students with their parents and teachers visited Białystok cultural heritage. During this trip parents of migrants and locals had a possibility to establish contacts (Młynarczuk- Sokołowska A., 2013).

The second educational project was based on a photographic workshop, which involved students from two different towns, schools and environments. Together, they discovered about Belarusian Wedding Reception (Charytoniuk), Oriental Mosaic of the Podlasie Region (Szostak-Król), Jewish Cemetery (Poczykowski), Shabbat Shalom(Sztop-Rutkowska).

Teenager's photos, which depicted the multiculturalism of the Polasie region, were then exhibited for the local community including migrant families (Młynarczuk-Sokołowska A., 2013).

These intercultural projects

" [...] were based on educational games that motivated students, fostered creative energy and were thought-provoking. They helped students to go beyond stereotypes and develop the ability to perceive the Other as interesting and important" (Młynarczuk-Sokołowska A., 2013).

A totally different approach has been used in Italy, where there has been a significant increase in the influx of migrants particularly at the beginning of the 20th century. In fact, for the first time, the CM 301/1989 ¹law has allowed migrant children to study in Italian schools. Therefore, children were split into groups of two-to-three children per class, while their tutors were teachers specialized in children disabilities. Although this document has provided the integration of migrant students into classes, it had not introduced the understanding of intercultural education. Only in the 1990s, the CM 205 ²law mentioned the idea of multiculturalism. Indeed, according to Gianna Pasquale (2004) different intercultural activities were organized, but they built only "*work in progress*" in schools. For this reason, Italy is still facing difficulties. There is no specific practical intercultural approach. Teachers are intuitively adapting their pedagogical approach because of "a *lack of specific teaching tools for their work*". To solve this issue cultural mediators are introduced. Even though, they do not develop multicultural projects in schools.

The weakness of the Italian intercultural approach lies also at the academic level. In fact, migrant students tend to go to vocational schools while the Italians prefer academic schools (Busotti L., 2014).

Discussion

Intercultural education has deemed to be the solution for the integration of migrant children. However, it also gives big advantages to local children. Indeed, local and

migrant pupils in the polish schools developed knowledge about respect to other, curiosity, stereotypes, prejudices, discrimination and cultural difference in communication.

Poland succeeded in the intercultural approach thanks to the collaboration between the University of Białystok Foundation and the Foundation of Education and Creativity.

Furthermore, to highlight the necessity of intercultural project at school is the rector of the University, Jerzy Nikitorowicz, who states that

"The paradigm of coexistence constitutes the basis for intercultural education. It also determines its main goal, which is to prepare society for living in the post-modern world, where diversity is inherent" (Młynarczuk-Sokołowska A. 2013).

In Italy, institutions seem to struggle when there is a necessity of multicultural projects. In fact, according to Gianna Pasquale(2004) :

"Italian legislation in this field, even though it is effective and potentially rather advanced, has not yet a systematic and programmatic implementation in 'real' school."

It suggests that the weakness of the Italian approach does not depend only on economic decisions. As a result, migrant children are integrated thanks to cultural mediators in schools, but direct contact and development of intercultural skills seem to be missing.

What this small study shows is that considering migrant children as an emergency and not as a cultural resource may raise borders between cultures. UNESCO Guideline and the T-KIT are useful to have a clear idea of what intercultural education means in practice, but they are not enough. For this reason, there are still countries which face difficulties in developing this type of projects.

Conclusion

In the world where the phenomenon of migration is changing the geographical, historical and social ideas of nation, teaching new generation differences has become a global necessity. In this paper, the new pedagogical approach is analyzed and compared to show that two guidelines are not enough for an efficient practical educational approach. As a result, there is a need for human and financial resources. Without referring to some practical methods reported in the T-KIT, this paper suggests that in order to create a common efficient intercultural approach among migrant and local children, further research might be recommended.

¹ https://www.edscuola.it/archivio/norme/circolari/cm301_89.html

² http://www.edscuola.it/archivio/norme/circolari/cm205_90.html

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Adapting Complex Time: 'Story of Your Life' (1998) and Arrival (2016)

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Abstract

In both literature and film, we're faced with complex characters, complex plots, complex themes, complexity in narration and, occasionally, complexity in narrative structure, all of which have been long present in fictional works and all of which have been addressed extensively by scholars (we've witnessed a resurgence of these terms in academic circles in recent years following the rise of the puzzle film in the 1990s). But what can be inferred when we consider narrative complexity in terms of adaptation? For this study, I consider complexity in relation to nonlinear storytelling and apply stylistic methods of analysis to the blockbuster film Arrival (2016) and its source text - Ted Chiang's short story, 'Story of Your Life' (1998). The aim of this paper is to examine narrative complexity in adaptation and address questions surrounding what is adapted in such cases, how it is adapted, and the effects both versions of such a text can produce. The argument that I advance is based on the premise that by breaking down the text (moving image and printed text) into its narrative components, we can develop a better understanding of how complex narratives such as this operate across platforms. My analysis focuses on the nonlinear narration, narrative focalisation and the presentation of coinciding narrative frames that are present in the source text and its film adaptation.

Keywords: Narrative Complexity, Film Adaptation, Nonlinear Narratives, Cinema and Literature

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Introduction

This paper forms part of a larger research project in which the aims are chiefly concerned with the exploration of narrative complexity in adaptation, and this involves not only identifying the elements which contribute to *producing* a text which is complex, but also an examination of how those elements are *translated/adapted* across mediums. As it currently stands, my methodology adopts some key aspects of structural approaches to narrative (including the binary understanding of how narratives operate across two levels - the story level and the discourse level). The story level refers to the events which comprise a text (narrative); the discourse level refers to the methods via which those events are presented within the text (narration). This approach has enabled me to distinguish several shared aspects within complex narratives, including structural aspects such experiments with temporality, chronology and causality within frames, as well as aspects on the level of narration, which constitutes analysis of 'twist blindness' (Barrett, 2009, pp. 62-86), and examples of deviant narration/the unreliable narrator. My primary interest is in the examination of how these aspects are formulated on both narrative levels, with the aim to gain a further understanding not only of narrative complexity as a general concept, but also with a specific focus on texts in adaptation.

Both versions of the text that I intend to discuss in this paper – *Arrival* being the film version, and 'Story of Your Life' being the written text that it was adapted from (which is a short story) – are *nonlinear*, in that the events of the story are presented out of chronological order. This is one of the elements which enables us to identify both versions of the text as *complex*. Within this paper, I would like to focus on not only *how* this element of complexity is produced within the narrative, but also *how it is adapted* and translated across mediums, from the printed words on the page to the audio-visual medium of film, in order to produce two very contrasting experiences of this story. In order to achieve this, I will introduce some key terms and approaches from the field of narratology, before examining the opening sequence of the film and comparing it to the opening of the written text, in order to try to understand more about how the audience of the film and the readers of the text experience this story in such different ways.

In the beginning...

'I used to think this was the beginning of your story,' Dr Louise Banks (Amy Adams), a professor of linguistics, narrates over the opening shot of Dennis Villeneuve's 2016 science-fiction blockbuster, *Arrival*. Adapted from Ted Chiang's 1998 short story, 'Story of Your Life' – a text which presents a philosophical thought experiment exploring the concepts of choice and free will, the nature of time and chronology, and the complexity of the human experience – the film, like the text, opens with the moment our lead protagonist is faced with the life-altering question of whether or not she would like to try and conceive a child with her partner; a moment which bookends the narrative in both versions.

Only in the film version, the context of this moment is absent. Instead, the focus is placed on the thematic element of memory, and we are provided with a lingering wide-angle shot which frames the floor-to-ceiling window of Louise's home, overlooking an outdoor space (Image 1). 'Memory is a strange thing,' comments

Louise in voiceover. 'It doesn't work like I thought it did. We're so bound by time, by its order.'



Image 1: The opening shot of Arrival (2016)

The lingering shot finally breaks into an image of Louise holding her baby after birth, and we're then presented with a sequence depicting the child's (Hannah's) development and, within a few frames, her death as an adolescent. The questions encouraged with Louise's opening line now seem to gain some answers – the direct address ('your') is assigned to her daughter, and our narrator is placed at some point in the *future*, when she has seen her daughter grow and pass away and had time to reflect upon the moment which she can consider to be the 'beginning of [her] story.'

'And this was the end,' her voice resides over a shot of her standing by her daughter's hospital bed. The apparent flashback sequence then ends on an image of Louise, shot from behind, walking around a seemingly endless hospital corridor following the death of her daughter, before the main narrative frame opens, tracking the movements of Louise through the college where she works. 'But now I'm not so sure I believe in beginnings and endings,' the voiceover continues, marking a distinct shift not only in location, but in time as well – we now assume the events taking place are occurring days, weeks, months, maybe even years, *after* Hannah's death. Initially, chronology follows, and the main narrative frame remains faithful to traditional laws of causality, with images of Hannah only sporadically recurring as flashbacks/formulations of Louise's memory of the child she's lost. However, as the narrative develops and temporality is experimented with, the distinctions between separate temporal narrative levels begin to blur, leading up to the film's narrative twist. When this occurs, it becomes necessary to revisit the assumptions made within this opening sequence and rewrite them.



Image 2: Establishing shot depicting the spacecraft of the aliens

The puzzle film

Arrival provides audiences with a classic example of a contemporary puzzle film in that it 'rejects classical storytelling techniques and replaces them with complex storytelling' (Buckland 2009, p. 1). Mirroring quite closely the framework of its written counterpart, the plot of the main narrative frame depicts the arrival on Earth of twelve extra-terrestrial spacecraft, positioned in seemingly random locations across the globe. In the United States, Dr Louise Banks is commissioned by the government to work alongside theoretical physicist Ian Donnelly (Jeremy Renner) to act as an interpreter, provided with a mission to learn the alien language in an effort to be able to put forth two key questions and translate their responses: 'What do they want?' and 'Where are they from?' Labelling the aliens 'heptapods' due to their seven-limbed physical frame, and nicknaming them 'Abbott' and 'Costello' ('Flapper' and 'Raspberry' in the written text), Louise identifies their two forms of expression – Heptapod A (referring to what is "spoken"), and Heptapod B (referring to what is "written"). After a number of recorded encounters, Louise is able to determine that; a) the heptapods' means of communication bear no resemblance to any known human language; and b) that their writing is *semisiographic*, in the sense that it 'conveys meaning without reference to speech (...) [with] its own system of rules for constructing sentences, like a visual syntax that's unrelated to the syntax for their spoken language' (Chiang 1998, p. 131), making communication with them initially impossible.

It follows that, as a theme, questions surrounding time, memory and causality are introduced explicitly within the opening sequence of the film, and are then returned to and reintroduced with each lapse into Louise's apparent past in which her daughter was alive (via flashback, on the level of narration). Aside from the framework of a nonlinear narrative that the film presents, the complexity of the human construct of time is reinforced thematically in a number of ways. Firstly, in the written and spoken language systems of the aliens, as both adhere to a structure which is nonlinear and neither comply with any logical concept of word order or sentence formation -Heptapod B, the written language, is an 'entirely nonlinear system of orthography that [qualifies] as true writing (...) That meant the heptapod had to know how the entire sentence would be laid out before it could write the very first stroke.' (Chiang 1998, p. 129, p. 147). This indication within the written text gives light to several other considerations of complex time as a theme. For example, the flashbacks of Hannah appear incrementally throughout the narrative, occurring more frequently as Louise's grasp on the alien language develops. In confirmation of the Sapir-Whorf hypothesis¹, a complete understanding of the language allows Louise to explore and theorise the worldviews of the heptapods, enabling her to deduce that such views are comprised on the basis of the development of a simultaneous mode of awareness; with a paradoxical grasp on the laws of causality '[they experience] all events at once.' (Chiang 1998, p. 159).



Image 3: The two heptapods and their written mode of expression, which Louise labels 'Heptapod B'

The narrative twist

In a final visit to the spacecraft of the heptapods, which she attends alone, Louise uses her new skill to translate Costello's responses to her questions about the aliens' purpose on Earth. 'We help humanity,' Costello explains. 'In three thousand years, we need humanity help.' When guestioned about the alien's ability to see the future, Costello seems to trigger the appearance of another flashback of Hannah for Louise. In a moment in which our entire formulation of the narrative thus far is erased, Louise asks, 'I don't understand – who is this child?'. The second fork of the twist comes with Costello's response: 'Louise sees future.' The 'weapon' that she has been provided with - the language of the heptapods which corresponds with the simultaneity of their worldview - allows Louise the ability to view time simultaneously. It is with this that we come to understand that the moments in which Hannah has appeared have not been memories from the past, but are rather recollections of events from some point in the *future*. Our understanding of this narrative frame is replaced, and the two key lines of temporality (from the opening sequence and this main narrative frame) are explicitly linked in a way that the audience was not led to anticipate.

Simultaneity and *The Garden of Forking Paths*

With consideration of Jorge Luis Borges' The Garden of Forking Paths, David Bordwell, in his 2002 essay titled 'Film Futures', coined the term 'forking-path narratives' in order to outline a cohesive theory of the narrative techniques used in complex films such as Blind Chance, Sliding Doors, and Run Lola Run, whereby the protagonist is provided with a number of opportunities to reach an end goal, acting out a new path with each opportunity to create a variation of parallel possible futures. The failure to fulfil a deadline and achieve the narrative goal within the duration of a particular frame (or 'story') effectively triggers a reset, and the protagonist usually finds themselves back at the point within the narrative from which the path originally forked, providing them with another opportunity to fulfil their goal successfully via alternate means and methods. Bordwell argues that the path such a film ends on, depicting the protagonist's final attempt, is usually favoured above those that have preceded it in the interest of securing narrative closure for the protagonist. Bordwell notes that in many films which adopt a forking-path narrative structure, the protagonist appears to learn from prior attempts and thus is able to bring forth any learned knowledge to the subsequent path, which is then used to inform their decisions on which actions to take or avoid. Such an approach provides an explanation for Lola's ability (in *Run Lola Run*) to knowingly avoid certain obstacles that have blocked her path in previous attempts, thus *several versions* of Lola are created with each hit of the reset button and, like the lines of action depicted, exist in parallel to any previous versions, paths or worlds.

Adopting a similar approach in her essay titled 'Temporality, Reproduction and the Not-Yet in Denis Villeneuve's Arrival', Anne Carruthers' understanding of the film identifies the elements of past, present and future as separate locations or narrative worlds, positing that, '[t]he different timelines (...) [run] in parallel' (Carruthers 2018, p. 332). However, Arrival does not present a parallel formation of narrative frames; rather, the frames all occur along the same chronological timeline. Louise's life is still unfolding from beginning to end – she does not *physically* time travel between these different moments or destinations within her timeline. Instead, it is her perception which is no longer bound by the programmed chronology and sense of causality that exists within our understanding of how time operates, and the *presentation* of those frames is what breaks chronology in this particular example. In the same vein, it would be a misinterpretation of the text to suggest that several versions of Louise exist (i.e. future Louise, present or past Louise). Due to the complexities of temporality explored, and Louise's ability to view time simultaneously (which later analysis will show is an ability she holds from the very beginning, when we are introduced into the first frame), it is reasonable to deduce that there is only one version of Louise, and that is our character-narrator; a Louise who, narrating free from any constraints of time, causality or pressures of the present, is *simultaneously*; a) academic researcher working to decipher the written and spoken codes of the heptapods; b) linguist who has perfected the theories and formulations of Heptapod A and Heptapod B; c) not-yet-mother, mother, and mother of a deceased child; d) single woman, wife, and divorcee.

The simultaneity here presented invokes a paradox, which is introduced via the increasing frequency of tense shifts in the written text, mirrored by the increasing frequency of slips into alternate temporal frames in the film, producing a similar effect in both versions. Full understanding of the experiment being played out here comes for the audience when witnessing the ability for information to be passed between separate temporalities. With separate points in time effortlessly accessed, this acts as confirmation of the Sapir-Whorf hypothesis¹ that the text explicitly references and uses as a basis to reformulate temporal structures and expose a new potential for storytelling, offering up the basis for the thought experiment that the text seeks to explore; an evaluation between free will vs. determinism.

A breakdown in the narrative logic of causality, explored and enacted by the main narrative frame in both the written text and the film, sees open communication between separate temporal levels become possible. A complete understanding of the formulations of the alien language affords Louise the ability to retrieve information from a point at which that information has been learned in the future, and apply that knowledge within the present frame, *before* (logically or chronologically) she could have learned it. The exploration of the nature of time on a macro level, and the

¹ The Sapir-Wharf hypothesis is 'the theory that language influences thought to the extent that people who speak different languages perceive the world differently' (Skerrett 2010, p. 331).

presentation of that formulation, prevents chronology from becoming a vital narrative component. Situated outside the accepted laws of cause and effect, Louise is allowed to occupy all roles at any given point within the narrative because, as we come to understand upon a second viewing of the film, she possesses the understanding of time's true nature – that it itself is free from any linear formulation – from the very beginning.

The binaries of narrative

According to Buckland, 'In the end, the complexity of puzzle films operates on two levels: narrative and narration. It emphasizes the complex *telling* (plot, narration) of a simple or complex *story* (narrative).' (Buckland 2009, p. 6). This distinction between the two major aspects of narrative has been explored by a number of scholars, particularly with respect to narratological studies of the 1960s and 1970s, during which time various versions of this binary opposition began to surface. Versions of this set of binaries include, but are not limited to; *story* vs. *plot* (Forster 1974); *fabula* vs. *sjuzhet* (Shklovsky 1965); *histoire* vs. *discours* (Benveniste 1971); *story* vs. *discourse* (Chatman 1978).

With respect to written narratives, in an attempt to formulate a comprehensive understanding of the ways in which fictional narratives operate, especially those which subvert readers' expectations in some way, Monika Fludernik suggests a consideration of the relationship between the two elements of narrative structure (i.e. the *story* level and the *discourse* level), arguing that an exploration of how they communicate and correspond to one another can help to uncover how the 'concept of *chronology* [appears] within narrative typologies' (Fludernik 2003, p. 118). Whereas the *story* level of a narrative is largely understood as being the chronological version of events as they happened, the *discourse* level refers to the methods via which the story is *told*, and can therefore involve 'several reshufflings' between different narrative frames and temporalities in order to produce '*anachronies*' (Genette 1980, p. 35) – or flashbacks and flashforwards. As Fludernik suggests:

The study of these two temporal orders enshrined in story and discourse inevitably leads to the analysis of chronological distortions on the *surface level* of the narrative text, and therefore comes to connect the study of temporal levels with the surface-structure analysis of *tense* in narrative. (Fludernik 2003, p. 118, emphasis added).

Fludernik is one of many scholars who argue that an examination of narrative elements at a micro level can shed light onto how a structure operates on a macro level. When considering *Arrival* and its source text, an examination of the use of tense within the surface level of the narrative is key to formulating a strong basis of analysis from which a wider understanding of the thematic elements of the text, its complexities and deceptions, and the methods via which they are translated from a written to an audio-visual medium to produce different experiences, can be gained.

Narration and framing

Both the film version and the written version of this narrative present a case of homodiegetic narration, in that the 'I' who is narrating to us is also a character within the story. As previously highlighted, the opening sequence of the film firmly places our homodiegetic narrator, Louise, within a narrative frame which exists *beyond* the timeline of the story we are being presented with, as she, as though able to watch the images of the opening sequence back with us, is able to *reflect*, 'I used to think this was the beginning of your story.'

By contrast, the present for the narrator of the written version of the text appears to be the moment depicted in the opening shot of the film and occurring before the birth, or conception, of her daughter. She narrates in the present tense, 'Your father is about to ask me the question. This is the most important moment in our lives, and I want to pay attention, note every detail.' (Chiang 1998, p. 111). However, although the narrative present in the written text is perhaps less ambiguous and easier to identify than the narrative present within the film, with the contexts of the present moment made explicitly clear, it's important to note here that the distinctions between temporalities, even within the first two sentences of the text, are not as clear as we may initially interpret them to be. Although the third-person singular present tense verb ('is') is used several times within these opening lines and firmly places Louise within the moment of the present action, the contexts which surround the use of this verb indicate some degree of prior knowledge on the part of our narrator – her partner, the 'father', has not yet come to ask her the question, but she already knows what that question will be, and that it will lead to a life-defining moment which she will want to remember 'every detail' of. Not only is it suggested in these opening lines that Louise already knows what to expect of this moment in the narrative present, but her reference to the 'father' figure also indicates that she has prior knowledge of events that are to occur in the *future* – she knows that this moment will be the moment she makes the choice to try and conceive a child and that, following this, she will birth a child whom she can narrate this moment to. Thus, the key thematic elements of the narrative, particularly with relation to the exploration of our understanding of time and simultaneity, are hinted at within the first two sentences of the written text. The way this subtle indication is translated across mediums for the voiceover narration at the opening of the film can then be interpreted as making a more obvious reference to these aspects of theme: 'We're so bound by time, by its order.'

Conclusion

Villeneuve's film is not one that has remained unaddressed by academics in various disciplines. Several scholars have approached the film from the theoretical basis of cognition, leading to a shift in focus and highlighting some core aspects of the text that otherwise may not be brought to light with alternative theoretical readings and analyses. Both Anne Carruthers and Hannah Chapelle Wojciehowski raise the motif of Louise's daughter, Hannah, as a key contribution to developing an understanding of the text's experimental chronology. In a feminist reading which finds its analysis closely linked with cognitive attitudes, Carruthers argues for the theme of pregnant embodiment with the exploration of a "not-yet" child and "not-yet" mother, highlighting the importance of an audience's belief that both child and mother have already existed as such (and Louise has now lost her child) at the beginning of the text

in order to fully appreciate the emotional responses triggered by the text (Carruthers 2018). Carruthers claims that such an understanding is crucial, as it underpins the overarching theme of determinism². In a similar vein, incorporating Elsaesser's notes on the mind-game film, Wojciehowski argues that the prevalence of the recurring motif of a dead child (which we are aware of from the very beginning) 'almost certainly has to do with its utility as a mnemonic tool that helps the viewer sort through extraordinary complex information and retain the relevant pieces of the puzzle in memory for later assembly.' (Wojciehowski 2018, p. 57)³. Approaching the film from a basis of cognitive analysis, Wojciehowski later goes on to argue that the film poses similar difficulties in terms of audience cognition and understanding to Christopher Nolan's *Memento*, in that 'Louise Banks, the protagonist of Arrival, also struggles with memory problems, which place an incredibly large cognitive burden on viewers' memory capacity as the film progresses.' (Wojciehowski 2018, p. 59). I would argue this is a flawed interpretation in the sense that an issue with memory on the part of Louise is not offered as a key character element; it is not that Louise lacks a capacity for memory; rather, paradoxically, Louise struggles to come to terms with her new found access to memories of the future. Whilst existing literature which sees scholars adopt a cognitive approach to this particular text has outlined some aspects of the narrative which may have otherwise been left unaddressed, unfortunately this approach can often be based around largely subjective interpretations, lacking development and failing to provide a comprehensive understanding of how audiences are led to interpret the complex aspects of narrative and produce an understanding of the wider text as a whole.

An examination of the exposition and set-up of narrative frames reveals how the experience differs between the two texts. In the film, we are primed into the narrative to interpret Louise as being the character of 'grieving mother' due to the presentation of the opening sequence depicting Hannah's life and death, which, due to our familiarity with cinematic convention, we are encouraged to read as a flashback sequence. Every recurrence of Hannah that appears in the main narrative frame which follows is therefore immediately interpreted as being a lapse into Louise's memory of the past. In contrast, the written text not only highlights a different temporal frame as the narrative present (or the moment from which we are being narrated to), but it also makes explicit the fact that; a) Hannah is not a part of Louise's past, but instead should be anticipated as a part of Louise's *future*; and b) that Louise has some prior knowledge of this fact. A close reading of the text reveals that this information is offered in the first few pages of the written story, completely negating the possibility of such a twist to occur for the reader.

In the case of *Arrival* and 'Story of Your Life', complexity operates across all levels of narrative. Both texts involve a complex plot which presents a complex story and attempts to address a complex philosophical question via its method of narration: if you knew that an element of your future would cause such a degree of pain (i.e. the death of your child at a young age), would you still choose to enact that future and bring that child to life, knowing all the while what would happen? It is by breaking

² Carruthers goes on later to link this with issues surrounding sexual consent.

³ Wojciehowski here calls upon an element/motif of the mind-game film as outlined by Thomas Elsaesser (in Buckland 2009, p. 18): 'A character is persuaded by his – of more often, her – family, friends, or the community that she is deluded about the existence or disappearance, usually of a child – a self-delusion brought upon by trauma, excessive grief, or other emotional disturbance.'

down both versions of this text into their narrative components that we can begin to understand how the contrasting experiences are created for audiences of both versions, and how the complex elements of narrative and narration are translated across mediums.

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The Republic of Heaven: A Return to Mother Earth in Philip Pullman's His Dark Materials

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Abstract

Philip Pullman's *His Dark Materials* trilogy dabbles in theology, philosophy, and ecology, while pushing the boundaries of ideological and religious traditions, encouraging deep questioning of dominant social constructs. I argue that the novels implore the reader to deconstruct hegemonic systems of patriarchy in favour of ancient consciousnesses that centre around nature, the feminine, and connection with the universe. To elucidate the necessity of this intellectual and spiritual shift, Pullman crafts a revision of patriarchal histories, establishing a Republic of Heaven, wherein the female returns to a revered position and human beings are reintroduced to their birth right as conscious, physical beings at one with the world around them. Originally written for Queen Mary University of London, this dissertation consists of 17,000 words and six chapters. It is an in-depth analysis of Pullman's series, supported by extensive research. Due to limitations, the following text merely offers brief summaries of each chapter.

Keywords: His Dark Materials, Philip Pullman, Fantasy, Religion, Patriarchy, Sexuality, Paganism, Consciousness, Hegemony, Goddess, Earth, Nature

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Introduction

Philip Pullman's His Dark Materials trilogy is primarily regarded as an attack on religion. However, the novels show no signs of the cynicism expected from an apparent atheistic venture to free humanity from its faith. Instead, the series brims with uplifting themes that are traditionally religious, such as love, sacrifice, and truth, with the main character, Lyra Belacqua, serving as an undeniable humanist. Distracted by an enticing theological discussion, critics have failed to envision the ecological forces in Pullman's trilogy. A palpable focus on the energy of the universe and the importance of nature is woven unmistakably throughout the entire epic. The story bears strong resemblances to ancient matriarchal Earth cultures, imploring the reader to embrace more tangible sources of awe, such as the consciousness of humanity, the strength of woman, and the omnipotence and grace, not of a patriarchal god, but of Mother Nature. It is more an idealistic revision of religion than a rebuttal of it, a deconstruction that takes the origin story of a patriarchal hegemony and turns it on its head. The oppressive powers that brought to life "the abstract and alien concepts of a Father God who was the enemy of the Great Mother"¹ are meticulously scrutinised and remonstrated. These tyrannical ideologies are replaced with ancient ideals, "based on the understanding that Earth is alive and also a community of related living beings".² His Dark Materials is a study of humanity and its capacity, a petition beseeching that we rebuke the oppressive systems of organised religion and return instead to Earth-centric avenues of mindfulness that revolve around the human body's presence within nature and the human spirit's connection to all that is living.

Imagine Dust with a Capital D

Dust penetrates every crevice of *His Dark Materials*. In fact, it *is* the dark material to which the title eludes. This phrase is borrowed from *The Bible* itself, wherein God curses Eve and Adam for eating of the tree of knowledge: "*for dust you are, and to dust you will return*".³ The most significant element of Pullman's religious revision is the upheaval of this Biblical "dust" from the foreboding connotations of shame and death, into the empowering connotations of knowledge and consciousness. The word is used with reverence throughout the novels, spoken with fear by those in the Church who want to suppress it, and spoken with wonder by those seeking answers to its mysteries. The Church believes that Dust is "the physical evidence for original sin".⁴ The use of the word *physical* brings attention to the earthiness of Dust. What is of this Earth – physical, separate from "god" – must be eliminated. This is reminiscent of the dualisms that juxtapose "reason to nature, mind to body, emotional female to rational male,"⁵ an othering process that operates via separation. It is through these ideological binaries that the powers of both our world and Lyra's perpetuate the concept of nature as separate from, and inferior to, humanity.

In Pullman's revision, the man-made god is unmasked as a power-hungry authoritarian, and reverence is brought, instead, to the spiritual forces of the Earth and our role as human beings, to be stewards of nature, seekers of knowledge, and lovers

¹ Mor, Sjoo, p. 121.

² Harvey, p. 15.

 $[\]frac{3}{4}$ Genesis 3:19.

⁴ *NL*, p. 369.

⁵ Plumwood, p. 52.

of connectedness. Dust establishes a connection between all living beings that joins humanity with Mother Earth in the mutual cooperation required for the survival of both. Just as this energy links the human body with its daemon, so is the human body linked to the Earth. Dust is part of this connection, the knowledge of our own existence. Lyra becomes "aware of how small they were, she and her daemon, in comparison with the majesty and vastness of the universe".⁶ This awareness, for Lyra, is the guiding light on her spiritual journey.

Those operating outside of the patriarchal societies of man - the witches, the bears, the angels, and the *mulefa* - have very different views of Dust when compared to those of the Church; they understand it to be the physical proof that "the universe is sentient and meaningfully alive and, in turn, Dust is revealed as the physical manifestation of God/love/consciousness".⁷ The *mulefa* offer the greatest example of this. Mary Malone believes that they are "so strongly rooted in the physical everyday world",⁸ so much closer to enlightenment, that they are able to visibly detect Dust, which is imperceptible to humans. Dust exists indiscernibly, the same way as do the electromagnetic forces of our beating hearts and the radio waves by which we communicate - not visible to the human eye, but no less real and detectable. The mulefa's evolutionary interdependence with the seed pods has brought them to a higher state of being and an understanding that if we continue to neglect and damage the Earth, we will lose our oneness with her and with each other. We will lose Dust. However, Xaphania advises we can create Dust by helping others "to learn and understand about themselves and each other and the way everything works, by showing them how to be kind instead of cruel, patient instead of hasty, cheerful instead of surly, and above all, how to keep their minds open and free and curious".9 It is through seeking deeper connection – with ourselves, with others, and with the world around us - that we truly thrive within our existence and are able to share a universal love.

Though each of us has the potential (however latent) to become more deeply cognisant of our own being and of our birth right to an intimate and loving relationship with everything around us, there will always be forces working to suppress such connections: "The established patriarchal institutions all have a vested interest in keeping the individual mind disconnected from the experience of cosmic oneness".¹⁰ Systems of power work within *His Dark Materials* to keep Dust from "infecting" children, in order to create a world full of mindless adults who are unable to access their humanity. By declaring that we are made human by our opposition to nature, the colonising forces are, in actuality, mutilating our humanity. Dust is the mechanism by which that separation can be healed, the undeniable energy of the universe that sits outside the margins of our awareness, the matter that calls us back to our human nature and to Mother Earth, from whence we came, from dust to Dust.

- ⁸ *AS*, p. 222. ⁹ *AS*, p. 496.

⁶ NL, p. 396.

⁷ Cox, p. 139.

¹⁰ Mor, Sjoo, p. 139.

The Fall and the Divine Feminine

The appearance of Dust arose upon "the great change in human history symbolized in the story of Adam and Eve".¹¹ If we understand that Dust is the awareness of being, we can see that the series redeems original sin as knowledge, something wonderful that should be desired. The moment that Eve and Adam fell, then, would be the moment that they realised their creator, Mother Earth, and their connection with her and all her living beings. "*Ever since we have had the* sraf, *we have had memory and wakefulness. Before that, we remembered nothing*",¹² Atal tells Mary. Though the *sraf* (Dust) is always in existence, the awakening of Eve and Adam made it accessible to humanity.

Pullman's reconsideration of the Fall is reminiscent of ancient Earth religions, which centred around the female. In almost every archaeological exhuming of ancient civilisations, we have discovered images of the Great Goddess. The female is shown to be dominant in these societies, while the male is depicted most often as a labourer.¹³ These relics point to "a once gynocratic world. The further back one traced man's history, the larger loomed the figure of woman".¹⁴ *His Dark Materials* turns attention back to the Divine Feminine by weaving a cast of remarkable women. Lyra is prophesised to be an Eve figure whose ability to read the alethiometer derives from "grace that comes freely",¹⁵ a deep connection to spirit. Similarly, Atal explains *sraf* through a tale featuring a female protagonist who interacts with the oil from the tree of knowledge and becomes conscious via Dust.¹⁶ Though patriarchal structures have woven a falsity wherein Eve is "at fault" for "The Fall" of humanity, Pullman's Republic of Heaven positions females as the saviours of humanity.

In stark contrast to the Biblical tale, where "*Adam named his wife Eve*",¹⁷ the female *mulefa* invites her male counterpart to join her in creating a relationship with the Earth and its creatures.¹⁸ Matriarchal societies are known for this kind of harmonic existence between both sexes and between humans and the Earth, consisting of non-possessive intergroup relationships, everyone working together to support the society and the Earth on which it relies for shelter, sustenance, and life.¹⁹ Females like the *mulefa* and Lyra are the link between humanity and Mother Earth. The revision of the Fall that unfolds within the novels reconstitutes the ideologies surrounding the attainment of knowledge. The reading of Genesis that Lord Asriel imparts upon Lyra has an entirely different moral from that of the Divine Feminine:

'But when the man and woman knew their own daemons, they knew that a great change had come upon them, for until that moment, it had seemed that they were one with all the creatures of the Earth and the air, and there was no difference between them: And they saw the difference, and they knew good and evil; and they were ashamed...'.²⁰

¹⁵ *AS*, p. 495.

¹¹ *AS*, p. 222.

¹² AS, p. 223.

¹³ Boulotis, p. 77.

¹⁴ Gould Davis, p. 16.

 $^{^{16}}AS$, p. 224.

¹⁷ Genesis 3:20.

¹⁸ *AS*, p. 224.

¹⁹ Gould Davis, p. 27.

²⁰ NL, p. 370.

Our Bible corroborates Lord Asriel's reading:

When the woman saw that the fruit of the tree was... desirable for gaining wisdom, she took some and ate it. She also gave some to her husband, and he ate it. Then the eyes of both of them were opened, and they realised they were naked.²¹

In both passages, the punishment for desiring knowledge is death, being banned from the tree of life, and hence, suffering mortality at the hands of a vengeful and unnatural god. No such horror resides in Pullman's revision, which instead centres around the females' essential roles in bringing something wonderfully human more tangibly into the world. When the female *mulefa* connected with the oil and the seedpods from the trees, the knowledge to which she awakened was not something for which she was then punished, being made to feel guilt and shame. Instead, she and her people were given the realisation that "the world was rich and full of life, and the *mulefa* lived with their trees in perpetual joy".²²

Female wisdom is aligned with ancient cultures that lived in a harmonic ecosystem with nature and considered the female to be the source of all life, worthy of celebration and respect. "The first 30,000 years of Homo sapiens' existence was dominated by a celebration of the female processes in the Great Round of the Mother".²³ These civilisations were matrilineal, wherein possessions were inherited by the daughters, and matrifocal, wherein the mothers were the heads of the families. The Lycians, for instance, living in Turkey around 500 B.C., were "under the rule of women... monuments and inscriptions corroborates that information".²⁴ Ancient agricultural village communities of Greece and Italy offer proof "recognising in every significant phase of life the mystery of the female power, symbolised in the mother goddess Earth".²⁵ Çatal Hüyük was a settlement thought to have existed since 7500 B.C., and excavations have found their culture to be "a ceremonial centre for the Goddess religion... no signs of warfare or weaponry have been found... The people were peaceful agriculturalists, mostly vegetarian".²⁶ Most records and proofs of these matriarchal societies were purposefully destroyed in the service of "the assumption that women are a subgroup... and patriarchy is equivalent to culture".²⁷ Patriarchy found footing by expunging and perverting this true history of humanity through the designation of the female as "exemplifying an earlier and more animal stage of human development".²⁸ Women resemble the ways in which animals mother their young, the ways of *nature*. By stressing this similarity, patriarchal forces could paint both woman and nature as weaker than, and inferior to, man. But this evidence is far more indicative of the power and consciousness of woman, whose role as a mother requires her to preserve another life, to rise to extraordinary selflessness. Furthermore, deeply in tune with nature through childbearing and menstrual cycling with the moon, woman has always been "closer to the deity than was man, [with] a superior understanding of the laws of nature".²⁹ The relationship between mother and child is

²⁴ Briffault, p. 283

²¹ Genesis 3:2-7.

²² *AS*, p. 132.

²³ Mor, Sjoo, p. 58.

²⁵ Bachofen, p. 104.

²⁶ Mor, Sjoo, p. 290-91.

²⁷ Rich, p. 3.

²⁸ Plumwood, p. 52.

²⁹ Gould Davis, p. 45.

akin to the relationship between Mother Earth and humanity, "two biologically alike bodies, one of which has laboured to give birth to the other".³⁰ Only the female body can create life, as Mother Earth created humanity, and while estrangement from the giver of this life is devastating, the joining of the two bodies produces a spirit of harmony and elation. And so, it is only fitting that the female awakens humanity to Dust.

Earth Religions and Eternal Life

Upon the dawn of humanity, we knew only the Earth that gave us nourishment and the animal and plant life that required our mutual care. His Dark Materials seems to harken back to these values, and to call for their return. The natural way of life experienced by the *mulefa* was ripped away from sentient beings in Lyra's world and ours, upon the rise of patriarchal colonisation. Ideological myths and masculine gods were invented by these new forces, overshadowing the culture of nature worship and matriarchal leadership. Ruta Skadi speaks passionately of the Church: "For all its history... it's tried to suppress and control every natural impulse... obliterate every good feeling^{".³¹} Patriarchal religion has always endeavoured to cleanse humanity of its memories of the past, including the ecstasy of oneness with the Earth. Pullman's trilogy revitalises "the sense that the whole universe [is] alive, and that everything [is] connected to everything else by threads of meaning".³² Ancient Earth religions encouraged communion with one another and with the Earth. We were not ego-driven beings, disconnected from one another and from source, functioning on a sense of greed and individualism, until patriarchal structures interpellated us into these mindsets. In Akrotiri, Greece, a 6,000-year-old settlement preserved by volcanic ash, wall paintings have been found that convey "the ritual gathering of saffron by young girls... under the gaze of the Great Goddess of Nature"³³. There is unequivocal proof within ancient history of our oneness with nature. Human beings did not exist within dualities – male and female, good and evil, light and dark – until religions discovered those ideas as effective tools of control that Ruta Skadi condemns as "cruelties and horrors all committed in the name of the Authority, all designed to destroy the joys and the truthfulness of life".³⁴ Hegemonic influences have long implemented cruelties, especially against women, relegating them to subservient roles, stripping them of any sense of power, convincing them that their natural bodies are shameful, and dominating them both physically and psychologically in ways that are entirely against nature. His Dark Materials shines a critical light on these crimes, and subsequently, opens a dialogue regarding the desperate need to return to our "true story" of existence as physical beings in relationship with the Earth.

Throughout the novels, death is spoken of without fear, and instead, intention remains on a "Republic of Heaven where we are, because for us, there is no elsewhere".³⁵ Life on Earth is what matters in this new Republic, where human bodies are to be celebrated and enjoyed, nature is to be mutually nourished and respected, and a divine consciousness, a "heaven on earth", is attainable. The series rejoices in the physical

³⁰ Rich, p. 32.

³¹ *SK*, p. 50.

³² AS, p. 451.

³³ Boulotis, p. 84.

³⁴ *SK*, p. 271. ³⁵ *AS*, p. 364.

world and "shifts focus from the intangible to the tangible; from hopes for a future paradise in an uncertain afterlife to creating your own paradise in the definite present".³⁶ These sentiments of presence are reminiscent of ancient Earth religions, which experienced "a union between the divine cosmic cycle, the cycles of life, and the recent dead. All ancient and contemporary aboriginal people conceive death as naturally continuous with life".³⁷ This mindfulness is emphasised within the series, and the fear of death is alleviated by the trilogy's explanation for the afterlife, wherein death becomes the joyful moment when your consciousness returns to oneness. Lyra describes this ecstasy when talking to the souls in the land of the dead: "When you go out of here, all the particles that make you up will loosen and float apart... into the air and the wind and the trees and the Earth and all the living things... part of everything alive again".³⁸ This idea that death leads to the blissful return of consciousness into all other conscious matter is prominent among Earth religions. where physical realms like heaven and hell do not exist, and instead, the soul is able to reconvene with the energy from whence it came, "the same in nerve cells as in stars and in human consciousness... surging through all life-forms".³⁹ This energy field is the same space to which the dead return in *His Dark Materials*.

The afterlife created by the Church – heaven or hell – is a lie; instead, all souls end up together in a sort of purgatory world. When Will cuts a portal into the world of the living, the dead are able to escape purgatory and commune again with the Earth. Roger's soul is the first to exit through the portal, and he "laughed in surprise as he found himself turning into the night, the starlight, the air... and then he was gone, leaving behind such a vivid little burst of happiness that Will was reminded of the bubbles in a glass of champagne".⁴⁰ Mary later witnesses similar emergences when she stumbles upon the window that Will has left open: "They took a few steps in the world of grass and air and silver light, and looked around, their faces transformed with joy... and held out their arms as if they were embracing the whole universe; and then... they simply drifted away, becoming part of the Earth".⁴¹ These descriptions of life after death are a vital element to Pullman's deconstruction. They pay homage to the ancient Earth religions of the past, in which death is not truly death at all, but a jubilant rebirth into oneness, the true eternal life.

Daemons as Representations of Sexuality

In the typical *bildungsroman*, the coming of age of the protagonist rarely involves their sexual awakening. Pullman, however, does not shy away from what he feels is perfectly expected within human nature, and the novels aim to eliminate damaging principles regarding sex and reclaim it as a joyous and natural act. This sex-positive philosophy resonates with ancient Earth religions, wherein "everything that exists is encouraged to become increasingly intimate".⁴² These cultures celebrated familiarity with the Earth and her living creatures, especially fellow human beings, and this includes the intimacy of sex.

³⁸ AS, p. 320.

⁴⁰ *AS*, p. 365.

³⁶ Myers, p. 35.

³⁷₂₈ Mor, Sjoo, p. 250.

³⁹ Mor, Sjoo, p. 108.

 $^{^{41}}_{42}$ AS, p. 433.

⁴² Harvey, p. 1.

The daemon is possibly Pullman's most powerful metaphoric device. Appearing in a variety of forms, daemons are signifiers of nature, of all that is innate and unadulterated, untouched by the egoic mind. Throughout the series, the daemon proves itself to be not the spirit, not the soul, but the *sexuality* of its human companion. At puberty, a person's daemon will settle into one true animal form, one true nature. As this happens for Lyra at the end of the series, we see that it is not her soul that changes, but her sexuality; she becomes aware of its existence for the first time. Like the Eve after whom she is modelled in this retelling, Lyra chooses knowledge, and her innocence blossoms into experience. Unlike in the "Fall", this new consciousness is empowering and triumphant.

In a world subjugated by the Magisterium, lapsarian shame is considered an integral part of femininity. Lyra even thinks of the word *shame* when pondering the taboo (touching another person's daemon), deeming it "a gross violation" and "forbidden by... something like shame".⁴³ Due to this shame, the natural body, at one with the Earth, becomes, instead, a subject, performing the behaviours it has been taught are acceptable. Hines submits that "the word 'taboo' suggests something created by human beings, something constructed rather than natural".⁴⁴ *His Dark Materials* promotes a reconnection with the natural, with our physical bodies through the invention of the daemon as a manifestation of sexuality, residing outside of the body, an animal to which we must recouple in order to heal the tear between ourselves and our true natures.

In three very different instances, Lyra's daemon is touched by another human – first, by an attacker; second, by Lady Salmakia in a show of dominance; and third, lovingly by Will. Each of these events is described with highly sexualised language, but never with Lyra feeling ashamed. The first was as if an alien hand "wrenched at something deep and precious".⁴⁵ The second is called a "violation";⁴⁶ and the third is praised as "pleasure and joy".⁴⁷ In these varied scenarios, Lyra is becoming increasingly aware of her sexuality and the privateness of a daemon, but she is present in the experience and is not feeling indignity or fault. Inversely, Mrs. Coulter believes that "daemons bring all sort of troublesome thoughts and feelings, and that's what lets Dust in".48 Steeped in ideologies of female subjugation, she uses her sexuality as a weapon, as in the interaction with Carlo: "The monkey raised [the snake] slowly to his face and ran his cheek softly along her emerald skin. Her tongue flicked blackly this way and that, and the man sighed".⁴⁹ Just as the descriptions of human hands touching Pantalaimon feature sexually-charged vocabulary, so does this scene. Mrs. Coulter appears keenly conscious of the prominence of her sexuality and its power, though unaware of how she has internalised patriarchal ideals into her own perception of herself. She believes that she is doing the right thing by tearing sexuality away from children before they feel the shame that she endures. "Intercision is a way to avoid sexual feelings... daemons are connected with natural sexual animal/feelings, which should be

- ⁴³ *AS*, p. 459.
- ⁴⁴ Hines, p. 42.
- ⁴⁵ *NL*, p. 274.
- ⁴⁶ *AS*, p. 168.
- ⁴⁷₄₈ AS, p. 503.
- ⁴⁸ *NL*, p. 283.
- ⁴⁹ *SK*, p. 310.

eliminated".⁵⁰ However, in the Republic of Heaven, the maturing of sexuality is a wonderful event to be welcomed and celebrated.

Lyra's sexuality is sparked by Will quite early in the series, "as if he were simply more in focus than anyone she'd known before".⁵¹ This budding sensation expands when Mary is telling the story of a man she once loved, who fed her marzipan with his fingers:

Lyra felt something strange happen to her body... exciting and frightening at the same time... She felt as if she had been handed the key to a great house she hadn't known was there, a house that was somehow inside her... she felt other doors opening too, and lights coming on.⁵²

This "great house" is Lyra's sexuality, and the lights are coming on inside of her, awakening her consciousness. This delightful description from Pullman aligns with his revision of sexuality as a desired and exciting expansion of self. Lyra's new wonder about the joy that accompanies physical experience comes to fruition when she mimics Mary's love story by feeding Will a piece of fruit that is only described as a "little red fruit",⁵³ symbolising the same fruit that Eve shared with Adam:

Her fingers were still at his lips, and he felt them tremble, and he put his own hand up to hold hers there, and then neither of them could look; they were confused; they were brimming with happiness. Like two moths clumsily bumping together, with no more weight than that, their lips touched. Then, before they knew how it happened, they were clinging together, blindly pressing their faces towards each other...⁵⁴

This beautiful and respectful moment implies sexual contact and awakening, promoting a world wherein pleasure is celebrated, just as it once was in ancient Earth religions. This new outlook on "the Fall" gives us two human beings, at one with the Earth and with their natures, and shows us the true glory of love and of sex. When the children engage intimately with each other's daemons, it is a romantic scene that further infers intercourse. Despite the taboo, Will reaches out to stroke Pantalaimon, and Lyra responds, putting "her hand on the silky warmth of Will's daemon, and as her fingers tightened in the fur, she knew that... neither daemon would change now, having felt a lover's hands on them".⁵⁵ When Mary sees Will and Lyra returning to the village after their awakening, she considers what she might see if she viewed them through her amber spyglass: "They would seem the true image of what human beings always could be, once they had come into their inheritance. The Dust pouring down from the stars had found a living home again, and these children-no-longer-children, saturated with love, were the cause of it all".⁵⁶ In *His Dark Materials*, what human beings are intended to be is one with love and knowledge, one with their bodies, in the ultimate manifestation of ecstasy.

- ⁵¹ *SK*, p. 307.
- ⁵² *AS*, p. 445. ⁵³ *AS*, p. 469.
- ⁵⁴ *AS*, p. 469.
- ⁵⁵ *AS*, p. 503.

⁵⁰₅₁ Hines, p. 43.

⁵⁶ *AS*, p. 473.

Conclusion

In a fervent rewriting of the Biblical myth of "the Fall", Pullman crafts a world where human nature, physical life, and Mother Earth are celebrated. The series serves as a reflection of our world, exposing the oppressive authority that insists on assimilation to sanctioned social structures and harmful ideologies. Dust represents sin, the prevailing panopticon that allows for unmitigated hegemony, both in the series and in our world. But in Pullman's revision, sin (Dust) signifies consciousness and knowledge, the mechanism through which humanity's separation from the Earth can be healed. *His Dark Materials* remythologises patriarchal religions by creating a Republic of Heaven where it is not only acceptable to return to the values of the Divine Feminine and ancient Earth religions, but it is encouraged as a path to salvation. If we are willing to shift our intention from dominating nature, to cocreating with her instead, we may discover peace and a renewed sense of wonder, restoring the long-elusive sense of feeling at home on the Earth. Our true place is not found in fabled heavens or hells, but here on this planet, amongst the nature from which we came.

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Soft Skills as a Tool for Interdisciplinary Teamwork of Product Designers

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Abstract

The results of the work of product designers are increasingly not possible without teamwork and especially interdisciplinary teamwork. Product designers often have a key role to play in such teams, and in addition to hard skills, they also need the soft competencies needed to interact in a team in order to be successful in their work. This study aimed to map the most important soft skills needed for interdisciplinary teamwork. 98 students in the field of product design and at the same time professional product designers took part in the international research. The research was based on the principle of a case study with journalist's investigative methods in combination with qualitative and quantitative research and comparative analysis of documents. These documents have identified the most necessary soft skills for product designers in the last five years. In the next phase of the study, the research work was focused on building a competency model of the most preferred soft competencies, which are: teamwork, problem solving, communication and time management. The competency model could guide the preparation of educational courses and workshops, in which soft competencies would be developed for students in the field of product design, but also for professional designers. The reason is the clear need for good acquisition and use of competencies that will enable better interdisciplinary teamwork.

Keywords: Interdisciplinary Teamwork, Soft Skills, Product Design, Job Market, Competency Model

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Introduction

Design has its origins in making things. Good designers are curious and interested in what is happening in the world around them. The innovations in all areas need more cooperation of different professions. Designers are usually in the centre of teams to be able to understand to other experts. The study is focussing on the soft skills of product designers that they need for their successful work at interdisciplinary teamwork. *"Teamwork empowers students through critical reflection, providing an emancipating learning situation in preparation for professional design practice"* (Findlay, 1997).

The starting point of this study is the assumption that designers will acquire professional competencies (hard skills) during their studies at university, but that they also need soft competencies for their work to be successful in their practice. The use of soft skills is considered natural and common for the work of product designers, but at the same time students in this field do not have many opportunities to strengthen these competencies.

One such option is to work in interdisciplinary teams, in which designers together with other experts design new products. In such situations, they must communicate effectively, be able to plan their work, solve ongoing technical problems and at the same time understand their teammates and also to their clients. Working in a team is primarily working with people. Employers and customers also want such skills from professional designers, so they cannot do without these competencies on the labour market.

The aim of the study was to compare which soft competencies are considered important by product design students and professional product designers, and what competencies are required of designers by the job market. Based on this analysis, a competency model of the most important soft competencies was created, which the product designer needs for his successful work.

The term "interdisciplinarity" is not confined only to academic settings, because it involves the combining of two or more disciplines as can be for instance research project. It is also about creating something by thinking in new way and across the common boundaries. There are several processes that can improve interdisciplinarity, such as ongoing coordination (Sveen et al., 1999), the assessment process (Avlund et al., 2002), and flexibility (Nancarrow, 2004), or effective communication and time management. This can lead to intuitive understanding between team members (Lamont, 2009). Flaherty (2015) even speaks of interdisciplinary cooperation "as a cognitive-emotional-interaction platform" that can connect individual team members.

We can then consider as an "interdisciplinary team" a group of experts (students), who are from several different fields (designers, engineers, economists, technologists, medics etc.) and who work together toward a common research goal or project (Nancarrow et al., 2015). Teamwork can significantly support the development of student skills, not only professional, but especially soft skills (Meizlish & Anderson, 2018). A joint project of experts from different professions can thus help eliminate competition between experts from the same field and give team members the joy and enthusiasm of working together and thus contribute to a higher quality of their results. Competence equipment that will lead to the effective functioning of teamwork will

eventually also lead to the setting up of certain organizational schemes, which will be able to follow teamwork by default in the future (Flaherty, 2015).

Personal development is often about "soft skills" that help people be successful not only at work but also in personal life. These competencies, which can include communication, the art of problem solving, people management, time management, flexibility, or teamwork, speak to our social interaction (Matteson, 2016). Hard skills, unlike soft ones, are job specific - for example, also in product design. The meanings of the individual specific soft skills differ slightly, but the aim of this study was not to unify their definitions, because in general the meanings of these competencies are clear.

This study developed a competency model of the most preferred soft skills based on international research among product design students and among professional product designers. In addition, the results of the research were compared with documents that in recent years mapped the soft skills of product designers in terms of labour market needs.

Methods

The research was designed as a combination of traditional and innovative methods that Walker (2018) calls *"journalist's investigative methods"* as an innovative approach with combination of quantitative analysis (questionnaire), qualitative analysis (interview with respondents and document analysis). The individual elements of the research were based on a case study, which defined the overall research environment. A total of 98 respondents were involved in the international research – 86 product design students from three universities and 12 professional product designers.

Case study

This case study addresses the issue of soft skills that designers need to successfully work in an interdisciplinary team and design new product designs. The study examines what soft competencies the product market requires of product designers and what competencies they consider important to work in an interdisciplinary team. It happens that product design students work in teams on assigned tasks already during their studies, but at the same time universities do not offer them courses in which they could develop their soft competencies. This creates an imbalance in the skills that designers have and need for their teamwork. This can stimulate a wider interest of students and motivate them to work in a team. (Yanamandram & Noble, 2006)

The case study maps the soft skills of product design students and professional product designers who have experience working in interdisciplinary teams and compares their own experiences with research that has addressed the soft skills of product designers based on labour market needs.

Based on these parameters, 86 product design students from three universities and 12 professional product designers were selected for the research. Students were from the following universities: 1) Ladislav Sutnar Faculty of Design and Art, University of

West Bohemia in Pilsen, 2) School of Design of East China Normal University in Shanghai, 3) College of Engineering and Design of Hunan Normal University in Changsha. Each of the respondents had to define the seven most important soft skills through a questionnaire. The results of the preferred competencies were analysed and summarized. In addition, an online structured interview was conducted with some respondents, the aim of which was to map the designers' experience with interdisciplinary teamwork.

Only 2 sources were selected for the analysis of documents that map the most important soft skills of product designers from the point of view of labour market requirements. It was a comparative analysis of documents that will not be older than 5 years and which were published online and worked with a sample of more than 100 respondents. Only 2 documents met such requirements, namely:

• Designing a Future Economy from Design Council's 2017 investigating report,

• 2019 Product Design Hiring Report first global survey of InVisionApp.

To verify the labour market requirements for soft skills for product designers, the qualification requirements of the National System of Occupations of the Czech Republic for the profession of product designer were also included in the analysis of documents. Product designers are increasingly in demand in the market (2019 Product Design Hiring Report first global survey, InVisionApp, 2019).

Results

The questionnaire survey of 98 respondents showed that the most important soft skills include: teamwork, problem solving, effective communication, time management, flexibility, presentation, empathy.

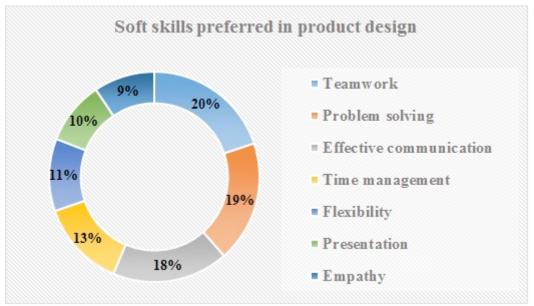


Figure 1: Results of international questionnaire survey.

And here are the comments of 6 respondents on the choice of preferred competencies:

• "Product designers often need to integrate various factors to advance their work. The most difficult part may be to understand how to balance different demands at all levels." (Jan, professional product designer, on-line interview, June 22, 2020)

• *"Effective communication and clear division of labor."* (Peter, professional product designer, on-line interview, June 24, 2020)

• "It is difficult to fully understand the starting points of the counterparty and to properly communicate one's own creative intention so that it is acceptable and understandable for other team members. So I would say that proper communication in a team is the most difficult." (Wenceslas, professional product designer, on-line interview, June 22, 2020)

• *"The most difficult for us was to find the way how to organize our work and how to communicate effectively."* (Jenny, student of product design, on-line interview, June 28, 2020)

• "With respect to other professions, it's important to be open. Listen, keep your eyes open, and then be able to look easily from above and between lines. The most important invention for such collaboration is certainly communication." (Stephan, graduate student of product design, on-line interview, June 29, 2020)

• "Getting on a team is sometimes very difficult and then finding the right role in it. Being able to explain your views is also very important." (Jan, student of product design, on-line interview, June 30, 2020)

The analysis of the document Design and Future Economy showed that the most preferred competencies are: planning and organization, problem solving, costumer handling skills, teamwork, communication, strategic management skills, literacy skills.

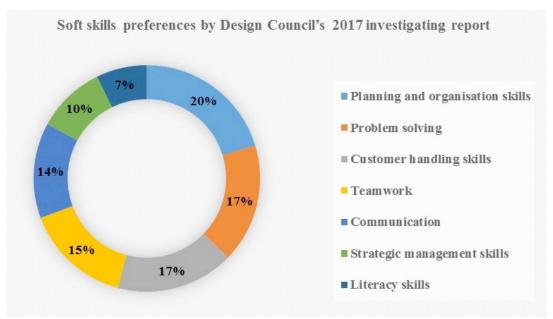


Figure 2: Soft skills preferences by Design Council's 2017 investigating report.

2019 Product Design Hiring Report survey showed that the most preferred soft skills include: teamwork, communication, empathy, emotional intelligence, presentation, leaderships and business operation.

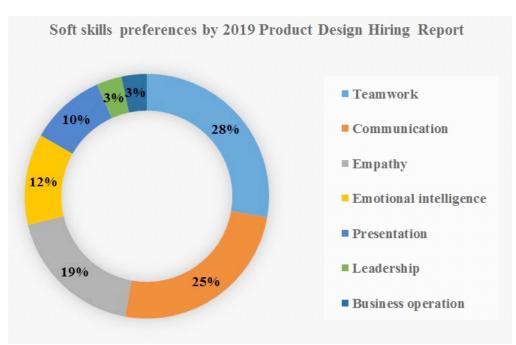


Figure 3: Soft skills preferences by 2019 Product Design Hiring Report.

The qualification requirements of the National System of Occupations of the Czech Republic for the profession of product designer shows preferred soft skills as communication, problem solving and team cooperation (https://www.nsp.cz/jednotka-prace/samostatny-designer-vyrob).

The aim of the final comparative analysis was to identify the most frequently preferred competencies between the questionnaire survey and documents and, based on that, to compile a competency model that will show the most preferred soft skills in the field of product design. These competencies are: teamwork, problem solving, communication and time management. Therefore, it is important for product design students and also for professional product designers to be able to develop these soft skills in the long run, so that they can later succeed in the job market.

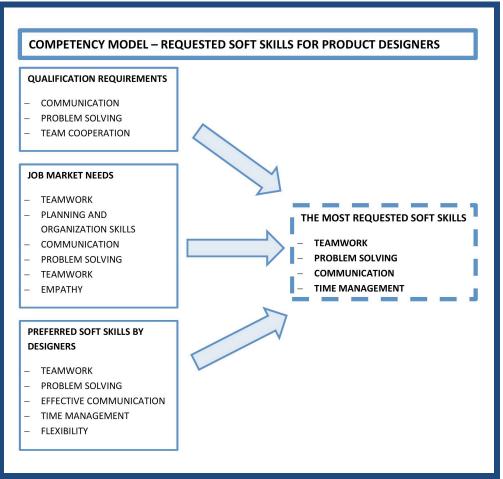


Figure 4: Competency model - requested soft skills for product designers.

Conclusion

The work of product designers is in great demand on the market, because production and services continuously develop new and new types of products for their customers, supplemented by various innovative elements.

Due to the high level of technological progress and the frequent complexity of new products, designers must work closely with experts from other professions who also participate in the development of new products. Such work is carried out in a team, which in this case we call interdisciplinary. Being successful in a team does not only mean being the best product design expert, but also being able to use a range of other skills to make the team work well and efficiently and to achieve the planned results in the optimal time. In addition to hard skills, soft competencies also have their application, which help designers succeed in teamwork and in the job market.

The case study maps the soft skills of product design students and professional product designers who have experience working in interdisciplinary teams and compares their own experiences with research that has addressed the soft skills of product designers based on labour market needs.

The results of an international survey showed agreement in the most preferred soft skills as evaluated by product design students from three universities and at the same time as evaluated by professional product designers. In this case, however, it was also a matter of agreement between the results of combined research and the analysis of documents in which the most necessary soft competencies in the field of product design were defined according to the needs of the labour market. Qualification competencies from the National System of Occupations of the Czech Republic then served as a comparative element.

Based on this comparison, a competency model of the most needed soft skills for product designers was designed. This competency model could be a guide for the preparation of educational courses and workshops, in which there would be the development of soft competencies for students in the field of product design, but also for professional designers. The reason is the clear need for good acquisition and use of competencies, which will enable better teamwork, communication, cooperation in solving problems and time management. Without this competence equipment, involvement in teamwork is very problematic. Investing in the development of soft skills in the field of product design will clearly pay off and will help designers in their better application in the job market.

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Resources

"2019 Product design hiring report" by InVisonApp: https://www.invisionapp.com/hiring-report

"The Bauhaus, and the collaborative critique" by Robert Findlay: https://www.acsa-arch.org/chapter/gropius-the-bauhaus-and-the-collaborativecritique/

"Designing a Future Economy" by Design Council: https://www.designcouncil.org.uk/what-we-do/research/designing-future-economy

"Interdisciplinary Collaboration" by Colleen Flaherty: https://tomprof.stanford.edu/posting/1468

"Qualitative evaluation of the implementation of the Interdisciplinary Management Tool: a reflective tool to enhance interdisciplinary teamwork using Structured" by Susan A. Nancarrow, Tony Smith, Steven Ariss and Pamela M. Enderby: https://www.researchgate.net/publication/269726573_Qualitative_evaluation_of_the_ implementation_of_the_Interdisciplinary_Management_Tool_A_reflective_tool_to_e nhance_interdisciplinary_teamwork_using_Structured_Facilitated_Action_Research_ for_Implement "Product designer" by National system of professions of the Czech Republic https://www.nsp.cz/jednotka-prace/samostatny-designer-vyrob

"Teaching in Teams: A Planning Guide for Successful Collaborations" by Deborah Meizlish and Olivia Anderson: http://crlt.umich.edu/sites/default/files/resource_files/CRLT_no37.pdf

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The Effects of Marketplaces on the Spatial Variability of the Urban Soundscape: A Multicase Study in the Department of Cauca (Colombia)

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Abstract

The soundscape paradigm is the emerging alternative to the reductionist vision of noise in all the cities around the world. In particular, urban sound studies of 21 century focus on integrating both physical and perceptual factors, which underlie the interaction between citizenship and its closest acoustic environment. This study examines the soundscape produced by marketplaces of 5 towns in the department of Cauca (Colombia). To do so, 50 noise measurements and 50 stereophonic recordings were made for the purpose of obtaining soundscape cartographies that allowed their proper evaluation. The findings prove a wide range of spatial variability, which suggests the conformation of positive and differenced sound experiences according to the particularity of each evaluated area. Therefore, it is concluded that the soundscape diversity can contribute to the social well-being of the population, especially if it is adopted during urban planning processes. In this logic, the inclusion and revitalization of public market areas can be considered, since their various layers of meaning are part of the invaluable sonorous imaginary of the city and its inhabitants. Likewise, it is also recommended to expand the scale of detail in future studies and to deepen in more technological and human resources for better representation and understanding of the urban soundscape.

Keywords: Urban Soundscape, Soundscape Mapping, Urban Planning

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1. Introduction

In recent decades, the rapid urbanization has resulted in the degradation of cities soundscape around the world, and this, consequently, has had serious impacts in social welfare of population (Hong & Jeon, 2014; Iglesias, Díaz & Soliño, 2014; Quintero, Balastegui & Romeu, 2018). However, the sound that is produced in the city is still a neglected issue in urban planning (Raimbault & Dubois, 2005). In most cases, government efforts are just focused on reducing urban noise, although such a control measure only partially improves the conditions of the urban environment (Stanners & Bourdeau, 1995; Berglund, Lindvall & Schwela, 1999; OECD, 2003). In that order of ideas, different scientific fields argue today, the need to use broader and more comprehensive approaches, that involve the different aspects related with urban sound: acoustic ecology and psychoacoustics, among the most prominent (Kang et al., 2016; Rehan, 2016).

Usually, there is the conception that Latin American cities tend to be excessively noisy (Suárez & Barros, 2014; Quiñones, Bustillo & Mehrvar, 2016), due to the vast sound production derived from various urban activities. In public market places, this circumstance seems to intensify, in principle due to commercial activity, but also, motivated, in some cases, by the simple idea of the meeting and social gathering. Further, despite the fact that countries such as Europe and Asia have carried out numerous studies on the sound produced in open public spaces (Kang & Zhang, 2010; Liu, Xiong, Wang & Luo, 2018; Zhang, Ba, Kang & Meng, 2018; Aletta et al., 2019; Van Renterghem et al., 2020), in Latin America little research attention continues to be paid to this issue. In this context, the present work proposes a study of the soundscape applied to the multicase of marketplaces in Cauca, a department of Colombia located in the most southwestern Andean region of the country. This research arises from a broader academic project on territory and multiculturalism carried out in the mentioned region during 2019 (Seber, Castro & Grijalba, 2019).

Thus, the aim defined in this study is based on examining the spatial variability of the soundscape of five public markets in the towns of: Santander, Mondomo, Pescador, Tunía and Piendamo, both of them located in the northern region of Cauca. The foregoing is developed through research focused on the sonic experience of the city. For this purpose, in the following section, the reference theoretical contributions are reviewed. Subsequently, the methodological considerations that were used to obtain the results are provided, starting from a detailed description of the study area. The fourth section is structured in the form of sound cartographies, which represent the physical factor and the perceptual factor of the soundscape. Finally, and in accordance with the analysis developed, a discussion is held on the importance of the soundscape in urban planning, which concludes in a proposal on future lines of research on the matter.

2. Theory

2.1. Soundscape research in cities

The soundscape is the «acoustic environment as perceived or experienced and/or understood by a person or people, in context» (ISO, 2014, pag 1). In this sense, soundscape differs from the acoustic environment in that: the former refers to a

perceptual construct; and the second, to a purely physical phenomenon. Now, in an urban context, the public spaces that are configured are diverse: parks, squares and public roads, to mention a few, and, in each of them, a wide range of soundscapes is originated (Ou, Mak, & Pan, 2017; Jeon, Hong, Lavandier, Lafon, Axelsson & Hurtig, 2018). Following that path, it is recognized that the resulting sound diversity is an invaluable resource for the city; an audible wealth, which, if appropriate, can contribute to the attractiveness of the city and the well-being of its inhabitants (Southworth, 1969). In sum, several studies argue that is necessary to understand the human response to the sound of the city, in order to identify and enhance the positive values linked to each urban soundscape in particular (Schaeffer, 1967; Truax, 2006, Hong & Jeon, 2017).

Conventional urban studies have only partially approached the question of sound and have excluded several of its sensory components (Agnew, 2011). These studies generally focus on the evaluation of the physical factor, through noise maps that usually identify places exposed to high Sound Pressure Levels (SPLs) to avoid their excessive propagation (Geraghtya & O'Mahony, 2016; Campello, Peral, Campillo & Velasco, 2017; Vasilyev, 2017; Wang, Chen & Cai, 2018; Di et al., 2018). However, reducing these levels does not *per se* guarantee the improvement of the quality of the urban environment, since the SPLs do not differentiate the different nuances of sound, which, in some cases, can evoke experiences highly accepted by people: improving the people's mood, trigger pleasant memories and encourage relaxation and recovery (Yang & Kang, 2005; Payne, 2013; Cerwén, 2016). Thus, as an alternative to biased and/or reductionist views of the sound, the soundscape approach in the city has emerged to better understand the ways in which sound is heard, perceived and felt in the urban environment (Jennings & Cain, 2013).

Recently, many investigations on the interaction between the set of acoustic signals of the city and citizenship have been carried out (Liu & Kang, 2016; Gill, Grabarczyk, Baker, Naghshineh & Vonhof, 2017; Torija, Li & Self, 2020). So that, it is known that the study of the soundscape in cities is not only based on the physical factor of sound but also on its perceptual factor (Davies et al., 2013; Bruce & Davies, 2014; Zhang et al., 2018). Gozalo, Carmona, Morillas, Vílchez & Escobar (2015, pag 2) point out that «the perceptual approach is aimed at identifying and describing the bases of the psychological processes that underlie people's appraisal of sound». Therefore, and beyond the physical factor of sound that is limiting, it is imperative to address the perceptual factor (Lui, Kang & Behm, 2013; Watts & Pheasant, 2015). Urban soundscape studies that manage to encompass all the factors concerned tend to be more effective (Leus & Herssens, 2015).

Several models have been dedicated to the classification of the perceptual factor of the soundscape in the city, which are commonly based on the emotions and affective qualities associated with perceived sound (Botteldooren, De Coensel, & De Muer, 2006; Brown, Kang & Gjestland, 2011; Latinjak, 2012; Aletta, Kang, & Axelsson, 2016; Kamenický, 2018). The work of Sun et al. (2019) has taken up the previous models and has proposed a robust hierarchy classification, which delimits the urban environment and the soundscape as an ecological entity susceptible to a comprehensive organization scheme. This scheme is oriented according to the following stages: the first stage, classifies the soundscape according to the extent to which the sound affects the general perception of the place, if the effect is less it is

called 'background' and if it is greater it is called 'foreground'; the second stage, distinguishes the 'disruptive' sound from the 'supportive', according to the type of use assigned to the place where such sound is produced. Here, disruptive sound can cause discomfort, while supportive sound promotes a lived experience fit for permanence; the third and last stage, define the sound according to its degree of excitement, so that, it can be 'calming' (low degree of excitement) or 'stimulating' (high degree of excitement). Additionally, broader ranges of determination are also considered. Kogan et al. (2017, pag 2) value the «sound as a resource that is liable to be planned and managed in space». Therefore, some evaluations of the soundscape also include cartographic techniques for its development (Liu, Kang, Luo, Behm & Coppack, 2013; Hong & Jeon, 2017).

Research in Latin America on urban soundscape is limited. Maristany, López & Rivera (2016), for example, carried out emblematic work by analyzing the soundscape of a public space network, made up of twelve squares and pedestrian paths in the centre of the city of Córdoba (Argentina). In this contribution, it was found that the objective and subjective parameters of the sounds were related in a non-linear way with the environmental quality of the place. Another outstanding contribution is that of Szeremeta & Zannin (2009), who examined the soundscape of urban parks in the city of Curitiba (Brazil), through an analysis between SPLs and perceptual indicators of sound. This work identified several conditions (land use, vegetation cover, vehicular traffic and types of public transport) that influenced the perception of the acoustic environments examined. Finally, Hermida & Pavón (2019) evaluated the soundscape of the cities Bogotá (Colombia) and Brasilia (Brazil), using fragments of binaural recordings. Their work showed that the perceptual attributes of urban sound change according to its spatial reference.

3. Method

3.1. Study area

The work is carried out in the north of the department of Cauca (Colombia). This region is characterized by being a cultural and ethnographic sector of great diversity and it is geographically articulated by an international road, known as the Pan-American Highway. In such a scenario, a 180m influence area is chosen around the markets of the North Cauca's towns of Santander, Mondomo, Pescador, Tunía and Piendamo (Figure 1). All the cases selected present the following characteristics: first, they are the main food markets of their respective populations, which frequently attract all inhabitants for the purposes of commercial exchange, gastronomy, culture and social life (Sandanter: 50,684 inhabitants; Mondomo: 4,906 inhabitants; Pescador: 2,421 inhabitants; Tunía: 1,949 inhabitants; Piendamó: 14,332 inhabitants) (Departamento Administrativo Nacional de Estadística DANE, 2018; Registraduría Nacional del Estado Civil [*sic*], 2020); second, they are located in areas with considerable building density; third, they are bordered by roads with vehicular and pedestrian flows, which make up vibrant and generally crowded environments; and, fourth and last, they represent part of the collective imaginary for their entire region.



Figure 1: Selected markets on the Pan-American Highway north of Cauca.

The Santander Market is located to the south of the town of Santander, in a significantly consolidated historical area, projected on an irregular form. The market works in a colonial building of approximately $5,138 \text{ m}^2$, which adapts to the new commercial reality of the place. Adjacent to this building and in a northwestern direction is a recently built public square, which conveniently complements the market's commercial function through small temporary open-air shops. This square also borders the Pan-American Highway to the west. Additionally, to the north of the area, the Cholado Park is located; a wooded park that provides recreation, leisure and free recreation services to the inhabitants of the place (Figure 2).



Figure 2: Influence area of Santander Market (180m)

The Mondomo Market is located southeast of the town of Mondomo, in an organic and sinuous urban form. This market has a roof structure installed of approximately 956m², which facilitates the daily work of traders. Likewise, two public squares adhere to this area, one to the east and the other to the south, which both of them extend commercial sales in small provisionally shops (Figure 3).

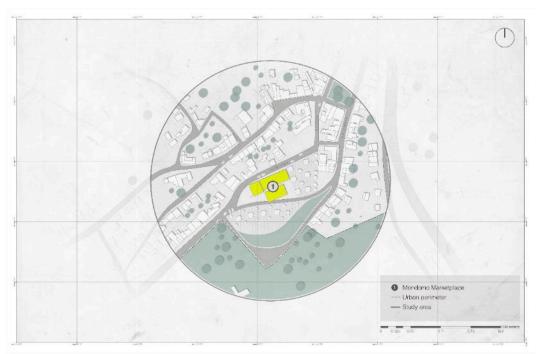


Figure 3: Influence area of Mondomo Market (180m)

The Pescador Market is located to the north of the town of Pescador, with some buildings that gradually disappear and give rise to a much more rural land aptitude. Unlike the other markets of this study, its commercial offer is of less impact and it does not have an infrastructure built for such activity, so its functionality depends on medium-sized tents installed on the open public space. Its area of occupation is only approximately $212m^2$ and borders directly with the Pan-American Highway (Figure 4).

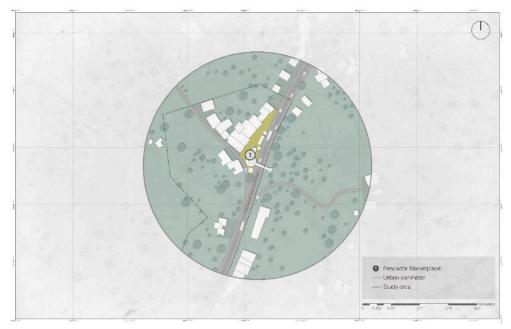


Figure 4: Influence area of Pescador Market (180m)

The Tunía Market develops its functions sporadically in the Central Park of Tunía, located in the northwest of the town of Tunía. The commercial activity of the market is developed in the open air and is very minimal since the recreational activity of the park predominates. The urban landscape of the place reflects the expected pattern of a Spanish-American colonial city, due to its typical central plaza that determines an urban fabric with orthogonal geometry (Figure 5).



Figure 5: Influence area of Tunía Market (180m)

The Piendamo Market is located in the centre of the town of Santander, in a fairly consolidated area with an irregular urban form. For the operation of the market, there is a roof structure of approximately $5,938m^2$, which completely occupies its respective block of location. In addition, around the market, in several of its closest streets, can find vendors in small shops that offer fruits, clothes and other products to the visitors (Figure 6).



Figure 6: Influence area of Piendamó Market (180m)

3.2. Data collection

Sampling grids were made to ensure the evaluation of the main factors that concern the soundscape in the markets under study. In accordance with the recommendations of Wei, Van Renterghem, De Coensel & Botteldooren (2016) and Liu, Kang, Luo, Behm & Coppack (2013), 50 x 50 m grid were designed for each of the selected markets. These grids had a distribution of 10 points and a recording time of 3 minutes for each sampling point, through which the physical and perceptual data were collected simultaneously (Figure 7).

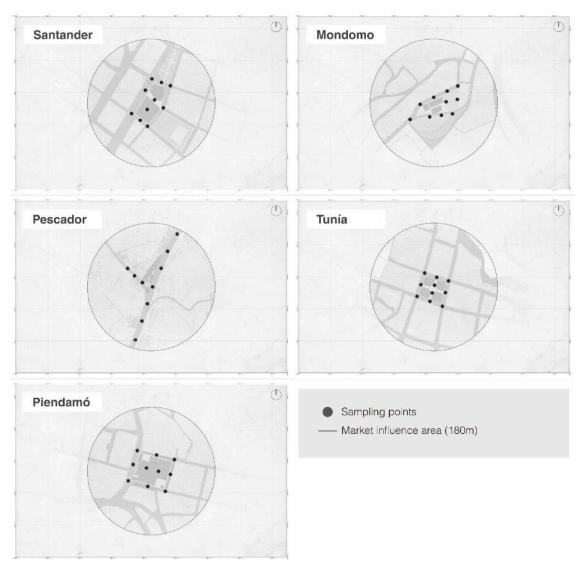


Figure 7: Sampling grids from the markets of: Santander, Mondomo, Pescador, Tunía and Piendamó.

3.2.1. Physical data

Regarding the physical factor, measurements were taken at a distance of 1.5 m from the ground with a Sound Pro Class II sound level meter of 1/3 octave bands and were verified using a high precision AcoustiCal AC-300 calibrator (European Parliament & Consejo, 2002; Zannin et al., 2013). The acoustic indicators evaluated were the equivalent level, the minimum level and the maximum level of sound pressure (dB_{Leq} , dB_{Min} , dB_{Max}).

3.2.2. Perceptual data

Regarding the perceptual factor, it was followed directions of Sun et al. (2019) and audio experiments were carried out to classify the affective qualities of the soundscape. For this, stereophonic recordings were made using a Sennheiser MKH 416 microphone and a ROAD BLIMP wind protection system. The audio samples collected were grouped according to their respective markets (10 samples for each one) and, subsequently, each group representing a particular market was randomly

assigned to 5 participants without hearing impairments (1 female and 4 men, $Age_{mean} = 24.2$ yr, standard deviation 3.8 years, range: 20-30 yr).

All participants conducted the experiments in enclosures isolated from external noise interferences. The recordings were reproduced using a laptop, equipped with the Ableton Live 10 Suite software, which allowed the previously assigned audios to be played. These audios were listened to through the Sennheiser HD 280 Pro headphones and their gains were adjusted proportionally to the set of volume records obtained *in situ* (Figure 8). In this way, an attempt was made to simulate an experience close to the reality of the cases studied.

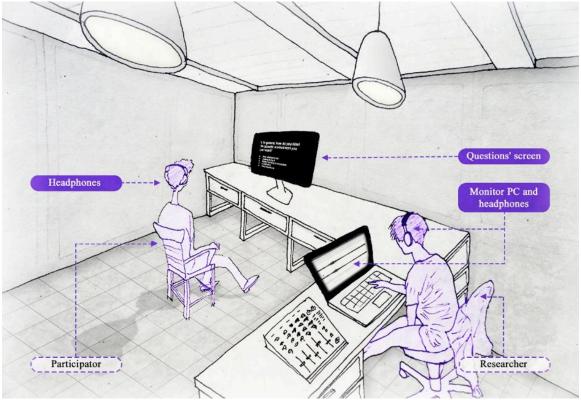


Figure 8: Experiment setup.

Specifically, the experimental procedure consisted of classifying the hierarchical order of perceived urban sound using a questionnaire (Figure 9). For this purpose, each 3-minute audio record was divided into 1-minute sequential stimuli, through questionnaires were applied¹ (Figure 4). То which the evaluate the background/foreground of the sound, the participants were asked: (Q3) How much did the sound draw your attention? Preceded by the contextual question: (Q1) In general, how would you label the acoustic environment you just hear? Which had as answer options: 'calming/tranquil' to 'lively/active', with the option 'neither' in the middle. According to the answer obtained in Q3, question 4a or 4b was presented (background response = 4a; foreground response = 4b). Meanwhile, the question that distinguishes between a supportive or disruptive acoustic environment depended on the activities susceptible to being carried out in places of interest: (Q5) Would the sound prevent the activities mentioned at the beginning? This question was previously framed by the

¹ The original questionnaire was translated into Spanish (regional language) for a better understanding of the participants.

contextual question Q2, which listed the series of possible activities to develop. Similarly, questions 6a and 6b were based on Q5 (supportive response = 6a; disruptive response = 6b). Finally, the contribution of the acoustic environment to the calmness/tranquility and liveliness/activeness of the place was evaluated. Here, question 7a or 7b was presented to the participants according to the response obtained in contextual question Q1 (calmness response = 7a; stimulating response = 7b).

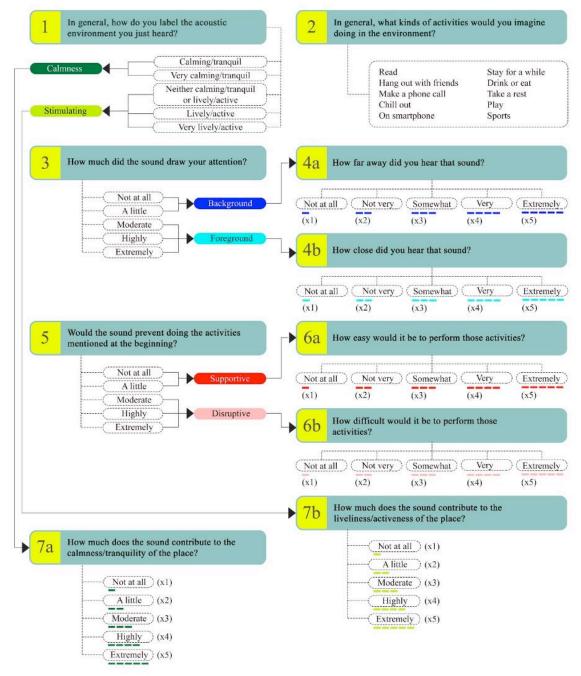


Figure 9: Flow chart of the questionnaire.

Participants had to experience each 1-minute stimulus first, and then answer the 7 questions of the questionnaire, presented on a screen with black background. The questions were assessed verbally, using an equidistant 5-point response scale. Note that only the values obtained from questions 4a-b, 6a-b and 7a-b were respectively

used to determine the background/foreground, supportive/disruptive and calming/stimulating qualities of the soundscape. The values at each sampling point were calculated by adding the result of the 3 stimuli (1 minute), into which each record was divided (3 minutes).

3.3. Geostatistical treatment

The acoustic indicators (physical factor) and the accumulated values of the affective qualities of sound (perceptual factor) were classified as analysis data, in order to carry out their corresponding geostatistical treatment. In particular, the method of regionalized variables proposed by Harman, Koseoglu & Yigit (2016) was followed, specifically the spatial interpolation «kriging». The reason to apply this method, it is its high precision in predicting spatial data.

The general equation of kriging is the following:

$$N_{\nu} = \sum_{i=1}^{n} W_{i} N_{i}$$

Formula in which, N_o represents the value of the soundscape variable to be interpolated at the point (x_o, y_o) and W_i are the weights that correspond to each N_i in (x_i, y_i) , used in the calculation of N_o . N_i corresponds to the values of the reference points used in the calculation and *n* represents the total number of observations used. For its resolution, experimental semivariance models were calculated for every soundscape variables. Then the semivariance models were adjusted to the theoretical models of the kriging: *exponential*, *gaussian* and *spherical*, through which the most suitable ones were selected for the interpolation of each variable. In this way, the creation of the interpolation surfaces, necessary for their subsequent mapping, was ensured (Goovaerts, 1999). All the above calculations were carried out in the RStudio software.

3.2. Soundscape mapping

The mapping of the urban soundscape is based on the visualization of its spatial behaviour pattern. The maps were made in the ArcMap 10.3.1 geographic information system, from the interpolation surfaces obtained in the geostatistical treatment. The present study chooses to map both the physical factor and the perceptual factor of the soundscape, although it is usually tackled to only the first or the second. The results section below is structured according to the maps obtained.

4. Results

4.1. Physical factor

The maps of the physical factor of the soundscape are shown in Figure 10a-b-c-d-e, the acoustic indicators were represented in a similar chromatic range, from pale green

(very low values), through oranges and reds (intermediate values) and ending in magentas and dark lilacs (very high values). The ranges of each indicator in each market prove to be differentiated and are listed in Table 1. In the case of the Santander and Mondomo markets, their acoustic indicators register a similar spatial behaviour: the lowest levels are concentrated inside the public squares adjacent to each respective market, since the commercial activity in those places is lower, while the highest levels are located in the perimeter margins of the referred squares, due, above all, to the confluence of their visitors, to their vehicular flow associated and playing music in the surroundings.

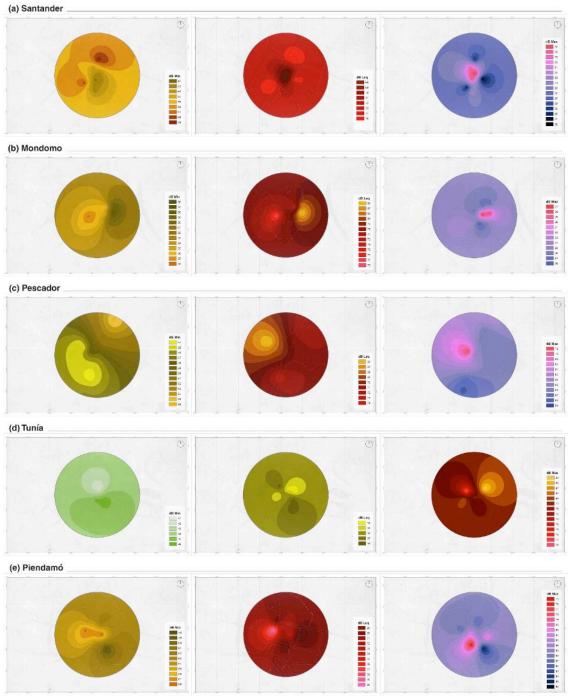


Figura 10a-b-c-d-e. Maps of the physical factor of the soundscape in the markets under study.

In the case of the Pescador Market, its acoustic indicators show similar spatial patterns: the lowest levels are concentrated in the northwestern margin, since it is an edge away from the vehicular flow, and, on the other hand, the highest levels meet at the margin southern, due to heavy traffic on the Pan-American Highway in that particular area. The low impact commercial activity of the market does not show to have a considerable impact on the registered indicators.

Markets	Ranges		
	dB _{Min}	dB _{Leq}	dB _{Max}
Santander	61 - 69	68 - 69	77 - 78
Mondomo	56 - 57	66 - 78	77 - 88
Pescador	54 - 66	66 - 74	78 - 89
Tunía	41 - 46	54 - 58	65 - 78
Piendamó	58 - 68	69 - 80	75 - 92

Tabla 1: Ranges of the acoustic indicators registered in each Market.

On the other hand, the acoustic indicators of the Tunía Market present spatial concentrations with partial coincidences: the lowest levels are focused to the northeast and southwest, and in a contrasting way the highest levels accumulate to the northwest and southeast. The causes are the occasional flow of vehicles and pedestrians that visit the Central Park of Tunía. Here, the much reduced commercial activity of said market is not reflected in the spatial pattern analysed.

For its part, Piendamo Market shows indicators with a comparable spatial behaviour: the lowest levels are registered, to the east, in areas with predominant pedestrian traffic and some sellers on the streets, while in the other margins of the market, which are not located to the east, the levels increase due to vehicular and pedestrian flows.

4.2. Perceptual factor

The maps that describe the spatial behaviour pattern of the perceptual factor of the soundscape can be seen from Figure 11 to Figure 15. In the case of the Santander Market, background, supportive and calming sounds obtain a higher degree of qualification inside the public square next to the said market. This pattern occurs because the interior of the square acts as an isolated place from the main commercial activity, and from the vehicular and pedestrian routes that surround it. In contrast, the foreground, disruptive and stimulating sounds are concentrated in the outer edges of the square, mainly due to the commercial activity at the entrance to the market, to the southeast, and the vehicular flow of the Pan American Highway, to the northwest (Figure 11).

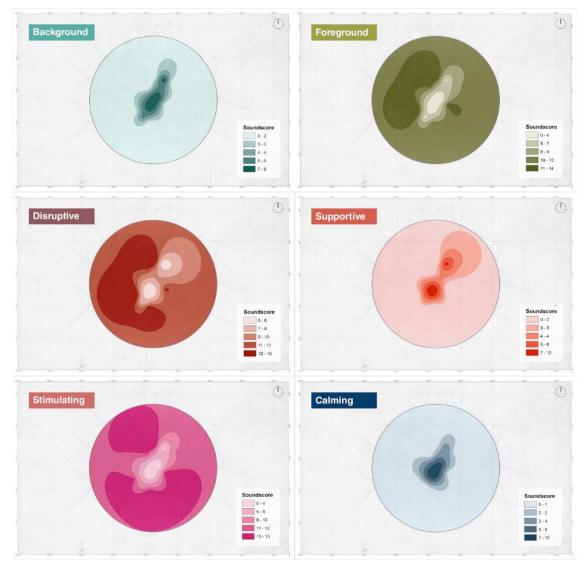


Figure 11: Maps of the perceptual factor of the soundscape in the Santander Market.

In the case of the Mondomo Market, concentrations of background, supportive and calming sounds are reflected on its southeast side, as a result of the adjacent public square that offers reduced commercial activity and the reproduction of music in the surroundings. Conversely, foreground, disruptive and stimulating sounds are brought together, to the southwest of the delimited area of influence, since in this place cargo trucks converge that frequently supply agricultural products to the entire market (Figure 12).

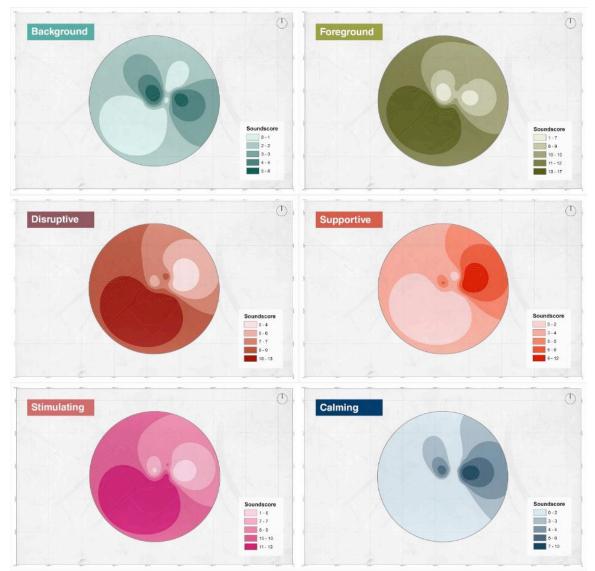


Figure 12: Maps of the perceptual factor of the soundscape in the Mondomo Market.

The background, supportive and calming sounds of the Pescador Market are recorded in its medium-size tents arranged for commercial purposes, in the centre, and on the Pan-American Highway, in the southern area. The pattern is due to the fact that the commercial activity performed in these tents is not high and the green environment of the rural area competes for the perceived global loudness. On the other hand, the foreground, disruptive and stimulating sounds converge, inversely, around the named areas, since in them held sway the circulation of heavy traffic of the Pan-American Highway and the mowing of the lawn by the public maintenance service of green areas, at the time of records (Figure 13).

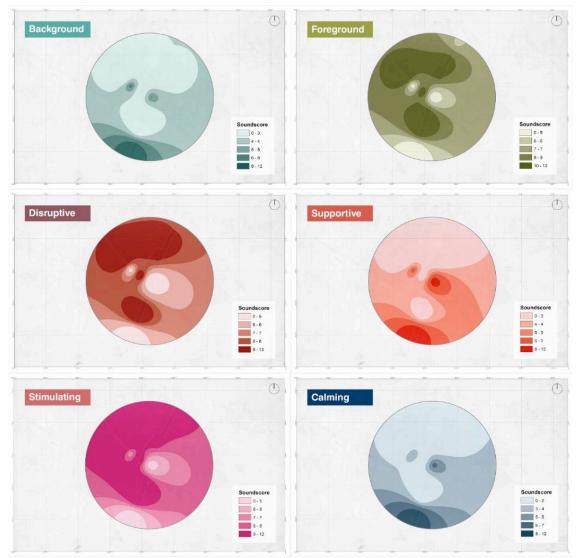


Figure 13: Maps of the perceptual factor of the soundscape in the Pescador Market.

The background, supportive and calming sound maps of Tunía show a spatial pattern similar to each other, which underlie the rest and free leisure activity developed in the northeastern corner of the Tunía Park. In addition, to the southeast of this park, there is a concentration of foreground sound, motivated by groups of people who meet in the public space. The expected sporadic market activity is almost nil and the disruptive and supportive sound has no record whatsoever (Figure 14).

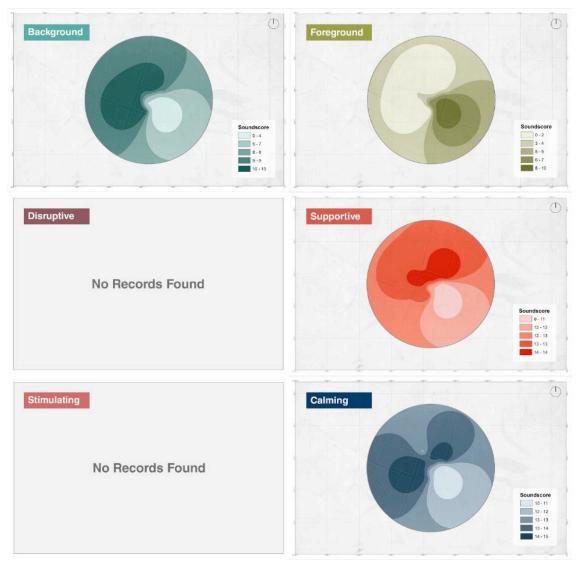


Figure 14. Maps of the perceptual factor of the soundscape in the Tunía Market.

Around Piendamó Market, the concentrations of foreground, disruptive and stimulating sounds show similar patterns, caused by *chirimias*² in the public space and by the confluence of visitors to the market. Moreover, the supportive sound is found to the southwest, since the music played on loudspeakers in the distance and the voices of pedestrians walking through the place prevailed.

² The *chirimías* are native musical groups of Colombia, which commonly play their music outdoors on instruments made of wood and which have had wide transcendence in Cauca.

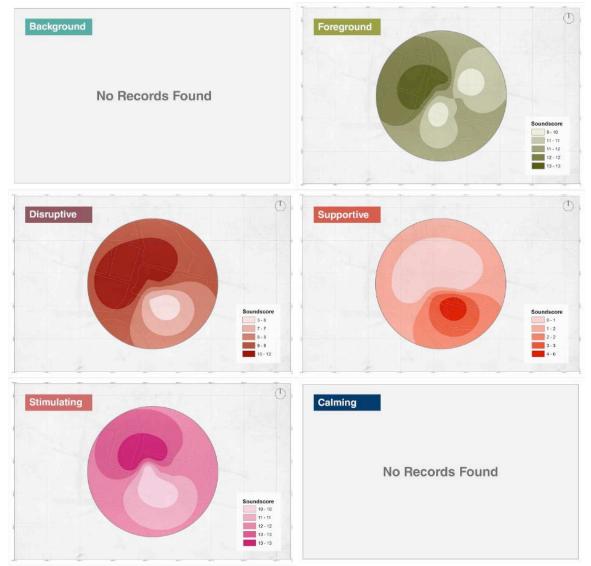


Figure 15: Maps of the perceptual factor of the soundscape in the Piendamó Market.

5. Discussion

The evaluation of the urban soundscape revealed a highly dynamic behaviour pattern. This spatial variability of the soundscape in the urban markets of Cauca is strongly related to the activities that take place there. The resulting cartographies in this study suggest that the human response to the sounds produced by music and the interaction of people in public space (voices, laughter, footsteps, among others) has a more supportive association, while the sounds of traffic vehicles present a more disruptive association (Chitra, Jain Chundelli, 2020). Therefore, the quality of the soundscape depends fundamentally on the kind of affective qualities produced in each particular acoustic environment.

Disruptive soundscapes are produced in those areas of the urban markets of Cauca with levels above 70 dB_{Leq}, whereas supportive soundscapes coincide with areas that are below the said indicator. This result confirms the postulates of Zhang & Kang (2007) on the design of the urban soundscape in two directions: the first, that when a certain level is exceeded, the reduction of SPLs is necessary; and the second, that if

the level is not so high, the introduction of sounds that reflect traditional and cultural characteristics of the place (live music, water fountains, natural sounds), can have positive effects on the shaping of an appropriate urban sound.

In general, the hierarchical classification of the soundscape proposed by Sun et al. (2019) fixed quite well to the urban markets in this study, although some particular circumstances are remarkable: on the one hand, the concentrations of the background sound coincide with the calmness and supportive sounds (music and murmurs of people in the distance); and, on the other hand, foreground sound concentrations converge in disruptive and stimulating sounds (traffic, horns, and excessive speech of people in the proximity). In this sense, due to the spatial correlation reflected in these situations, there are reasons to believe that the affective qualities of the soundscape in urban markets are intertwined in a more bidirectional sense (Figure 16).

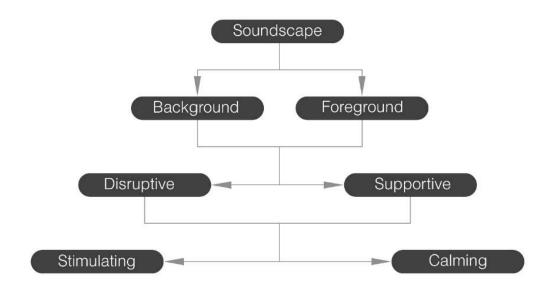


Figure 16: Classification of the soundscape in an urban market, based on Sun et al. (2019).

In any case, the paradigm of the urban soundscape lies in that physical factor and perceptual factor, are unavoidable to discern human responses to sound (Schafer, 1994). The perceptual data from this study show that urban markets, despite exceeding the 55 dBA limit established by the World Health Organization (Berglund, Lindvall and Schwela, 1999) and the Organization for Economic Cooperation and Development (OECD, 2003), can provide sound experiences that are significantly accepted by the public. This refutes several studies, which take for granted, that acoustic indicators of «urban noise» are sufficient to contribute to the creation of healthier and more balanced soundscapes. Thus, the present work qualifies the noise scales set at a global level, because by themselves they do not allow an accurate description of the diverse realities that occur in the Latin American city.

This research also corroborates that public squares adjacent to markets are strategic elements when improving the quality of the urban environment (Jia et al., 2020). The inclusion of the different factors that underlie the soundscape is, in fact, crucial in

formulating plans that reverse the negative trend of deterioration of urban sound. By virtue of this, urban planning and design should establish with greater accuracy guidelines for soundscape intervention, which, in the long term, ensure the development of the city (*e.g.*, reduction of sound levels from unwanted sources, recovery of green areas and implementation of alternative transportation systems).

6. Conclusions

The present work points out that the soundscape, widely conceived, should be useful to revitalize the public market areas since in its different layers of meanings the invaluable sound imaginary of urban inhabitants is constituted. Here we do not seek to argue that the auditory replaces the hegemony of the visual. On the contrary, it is taken as a consideration, which invites to incorporate the soundscape of the markets during the urban transformation processes.

Urban sound transcends the traditional exercise of physical measurement, even more in Cauca's town markets, which usually exceed the noise emission parameters established by international regulations. Indeed, it is assumed that the exhaustive exploration of the various behaviour patterns of the soundscape is more convenient to enhance the sound experiences that contribute to environmental health and, therefore, to the social well-being of the population.

The excessively silent city should not be directly associated with the quality of life of the inhabitants, without first considering the complex relationships that originate between the citizens and their closest acoustic environment. Certainly, it is from that perspective that it is appropriate to recognize markets as an integral part of audible wealth in Latin American cities. Those kind of urban environments, popular for their noise, make up, in some cases, vibrant soundscapes that are widely accepted by the community.

Finally, this study recommends expanding the study evaluation scales, so that, larger areas are involved, differentiated urban contexts are added, and the interaction between sound, space and city is deepened. Likewise, it should also deepen in more technological and human resources, which help to improve the representation and understanding of the urban soundscape.

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Synergistic Space Potentials: Technology, Humans and Responsive Materials in the Design Process

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Abstract

This project investigates the role technology and neuroscience play in making meaningful connections between people, architectural space and furniture. It discusses why it is important to focus on designing with more significant impact, focusing on the quality of experience rather than quantity of objects. It moves on to indicate that design can harness this power for social changes and discusses how technological relationships with humans can be the center of the design conversation. To interrogate this further, we have created a series of simulations, based on a piece of interactive, intelligent furniture as the centerpiece to an architectural space. It utilizes a computational pattern that is coded to respond to human activity. It is subsequently with temperature responsive bi-materials, which are coated materialized thermochromically, and electrically programmed with micro-controllers, and then connected to a computer code that makes readings based upon human interaction. Through this process, it manifests a methodology that categorizes the test results into: Static, Repetitive, and Non-static morphologies. These question the potential of the prototype, making certain that no elements other than the furniture and its integral parts are used to investigate a series of outcomes. The paper offers definitions of the process in the following terms: Repetitive Morphologies = consistent basis actions; Non-static Morphologies = non repetitive actions based on input variables; Static Morphologies = actions that don't change, or are considered unsuccessful. As the computational patterns and colors change, we are made aware of the relationships between space, technology, and the human sensorium.

Keywords: Technology, Neuroscience, Materials, Design

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Figure 1, left: Marina Abramović performance. Source: http://www.touchofclass.com.br Figure 2, right: Reference image. Source: https://news.softpedia.com/news/Internet-Does-Bring-People-Together-152398.shtml

Introduction

Today, there are numerous technological tools that connect people with one another. Nevertheless, isolation and polarization are becoming more and more common in the everyday life of people. The link between technological innovation and social segregation is a societal issue that lends itself to a design problem. Is there a way that technology can help us to strengthen verbal and non-verbal communication rather than create isolation? Can this enhance the experience of designed spaces and generate stronger emotional connections in order to stimulate empathic relations? In other words, can we use technology to humanize humans?

As discussed in the abstract, this project investigates the role technology and neuroscience play in making meaningful connections between people and furniture design and architectural space. It began at Istituto Marangoni in Milan with professors Sergio Nava and Stefano Caggiano, and discusses why it is important to focus on designing with a more meaningful impact, focusing on the quality of experience and the potential for more sensitive interactions in what we make as designers, and presents a rationale that places quality of design over quantity of objects. It moves on to discuss how design can harness this power for better social experiences, and how relationships between people and technology can be at the center of the design conversation. To examine these questions, we have designed a piece of intelligent furniture as the centerpiece to an architectural space, and throughout the process have incorporated a series of simulations based on potential interactions between people and surface that are enhanced by technology. It utilizes a computational pattern that is coded to respond to human activity, and subsequently materialized with temperature responsive bi-materials. Explorations were made utilizing thermochromic coatings that were also electrically programmed with microcontrollers. This was then connected to a computer code that makes readings based upon human interaction. Through this process, it manifests a methodology that categorizes the test results into: Static, Repetitive, and Non-repetitive morphologies. These question the potential of the prototype, making certain that no elements other than the furniture and its integral parts are used to investigate a series of outcomes. The paper offers definitions of the process in the following terms: Repetitive Morphologies = actions that are consistent or based on the activities of one person; Non-repetitive Morphologies = actions that are dynamic or move beyond mere repetitive results and are based on multiple inputs such as 2 people rather than 1; Static Morphologies = actions that do not change with consistency, or are considered unsuccessful. As the process unfolds, the computational patterns become dynamic and the thermochromic treatment make us more aware of the invisible forces at play. This process makes us aware of the relationships between space, technology, and the human sensorium.

Our methodology paves the way for future projects and larger scales, and discusses what worked and what didn't. It goes on to discuss how we see the process of public interaction unfolding as a spatial design strategy, and how the material investigations give way to 1:1 prototyping. It discusses how we used a marriage of computation and physical material studies to simulate a variety of potential outcomes and what these outcomes were, and finally, it discusses the way that this methodology was used to make specific material choices based on a series of failures and successes. It uses technology to bring people together with a built object.

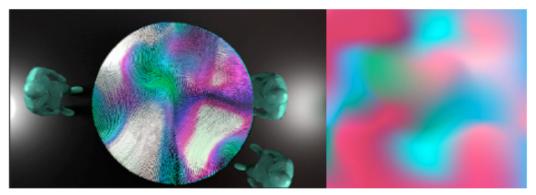


Figure 3: Drawing of a surface changing with multiple person interaction using Houdini; sensorium.

By investigating contextual awareness in the project presented, the paper explores exciting opportunities for multi-sensory design, and together with the use of different sensory elements explores the conception and creation of a piece of furniture that can change, in real-time, depending on the user input and bio-sensing. The project makes use of technology to capture one's body information using biosensors that measures heart activity, breathing rate, to create a synergistic relationship between this technology and optical surface material (thermal-chromic paint and bi-material to change rotation in the Z axis associated with electrical input) which is connected to a piece of interactive, intelligent furniture that presents this information back to the users in real-time. As users actively engage with the table, moods, emotions, and senses of well-being are brought to the forefront of the experience and user awareness. This information is displayed not virtually, but physically via a sensory approach to stimulate non-verbal communication between people, as a means to be more effective in communication, understand one another and to promote new experiences and meaningful encounters. Understanding is the key to empathy and, having a better conversation, is the main element to understand more each other.

In an age where technology and screen-based interactions continuously surround us, a physical, multi-sensory approach is revitalizing and provides new experiences. So, it is important that immersive physical experiences coexist and, that are balanced with

digital ones. This allows us to re-engage with the world in a new manner, emphasizing the positive aspects of technology and reducing the bad ones, such as depression, FOMO, problems in comprehension and deep retention, among others.

Using this project as a vehicle, the paper analyzes and revises the role of technology not only as a simple tool to extract information and design projects, but also as a platform to better understand one another and to have more efficient communication, and consequently, to nurture empathic and altruistic attitudes. It proposes a new way of designing for the future, fostering social, political, and environmental changes for a new and more humanized society.

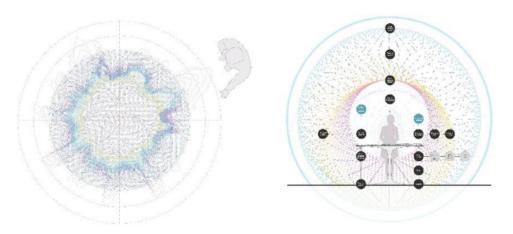


Figure 4: Plan diagram of table showing energy related to human. Figure 5: Elevation diagram of table showing energy, technology related to human.

Forms of Communication: Verbal & Non-verbal

"The most important thing in communication is hearing what isn't said." Peter F. Drucker

Verbal communication is a broad term for communication involving words, whether they are spoken, written, or signed. Verbal communication coexists alongside nonverbal communication, which can affect people's perceptions and exchanges in significant ways. Edward G. Wertheim, Ph.D. Northeastern University, wrote a paper called *"The Importance of Effective Communication"* that exposes how non-verbal communication interacts with verbal communication: "We can reinforce, contradict, substitute, complement or emphasize our verbal communication with non-verbal cues such as gestures, expressions, and vocal inflection."² Verbal communication is enhanced when a person is an effective listener. Listening does not simply mean hearing; it necessitates understanding another person's point of view, and for that, non-verbal communication plays a significant role. The ability to communicate nonverbally can be improved by paying closer attention to other people's unspoken behaviors such as eye contact, gestures, posture, body movements, personal appearance, tone of voice, among others. Being aware of what we say and how we say it is the first step to successful communication.

Albert Mehrabian, professor of psychology at UCLA, says that, when communicating about feelings and attitudes, words account for only 7% of the total message that

people receive. The other 93% is contained in our tone of voice and body language.³ Therefore, non-verbal communication should be stimulated for us to have a more productive conversation and to bond more, promoting more meaningful encounters. Understanding is the key to empathy and, having better communication is the main element to understand each other more.

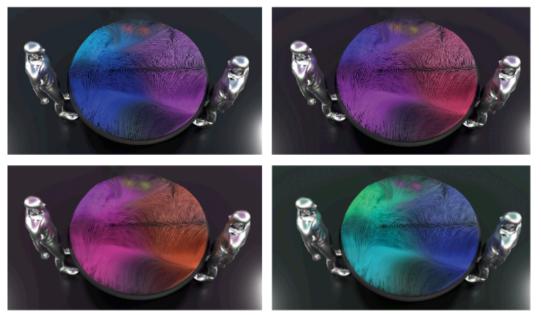


Figure 6: Simulations of surface changes with multiple person & non-verbal interaction, using Houdini.

Forms of Communication: Sensorium

Neuroscientists are continuously exploring the connection between the brain and the sensorial channels, through which we understand and perceive the world. For example, touching something with a texture can change a person's mood and influence the decisions a person makes.⁴ Touch also seems to be very important to a human's well-being, and it has been found to convey compassion from one human to another. But maybe the most interesting topic related to this theme is how human sensorium can intensify emotional connections. For example, some studies indicate that eye contact is vital to social encounters. "One brain-scan study found that when people that sustained eye contact, they began to blink simultaneously, and after a while, their brain activity synced up. These long gazes can make people feel more attracted to one another. Eye contact also signals that the person could reciprocate your affections." More and more, designers are exploring sensorial channels to build an emotional connection between the product and the user.

To move further into the understanding of sensorium, we can look at light quality and shadow. Shadow is the absence of light; therefore, it is possible to know the light by its shadow. This sentence represents the importance of opposites. In reality, we appreciate so much a positive situation, because we have been through a negative one and, through comparison, it helps us to put in perspective values and experiences, decreasing or increasing their level of importance. Technology has brought both positive and negative effects on our lives. On one hand, it has brought a positive impact in keeping us more informed, connecting better with each other, enhancing our user experience, accessing us in our daily activities, etc. On the other hand, technology is creating new disorders and diseases such as depression, FOMO (fear of missing out), and diminishing our comprehension and deep retention, affecting the morality of people, among other things.⁵

According to Andy Clark, a professor of philosophy and Chair in Logic and Metaphysics at the University of Edinburgh, "we are already cyborgs or "humanmachine hybrids", which means the physical merge of flesh and electronic circuitry, without the need for wires, surgery, or bodily alterations. He argues that it is arbitrary to say that the mind is contained only within the boundaries of our brain because it has always collaborated with external, nonbiological sources to solve better the problems of survival and reproduction of the Humans. He states that, "with the advent of texts, PCs, coevolving software agents, and user adaptive home and office devices, our mind is just less and less in the head. In other words, the separation between the mind, the body, and the environment are seen as an unprincipled distinction.⁶

Following this line of thought, if we are already cyborgs and technology is increasingly contributing to that, we have to enjoy the positive aspects and put some boundaries, reduce or extinguish the bad ones. Moreover, if the opposites enable us to boost experience and add value to a situation, it is interesting to design a product that increments that, through technology, by filtering the received input data and balancing the output outcomes.



Figure 7, left: Reference images of human cyborg technology & human-machine hybrids. Source: https://canadajournal.com.br/canada/a-influencia-da-tecnologia-e-a-sua-cada-vez-maior-presenca. Figure 8, right: Unsplash, Zana Latif.

Methodologies

With these theoretical ideas in mind, this paper also explores the potential design contribution that can arise from a process that employs computational logic and new media as tools for prediction, and how this can offer an acute method for designers to learn throughout the process of making. This process of simulation also aids in creating a more robust prototype. Using digital tools such as micro-controllers, Rhino, Grasshopper and Houdini, paired with physical testing, it interrogates a workflow between computational design, production methods & material logics. Through this process, it manifests a methodology that categorizes the test results into static, repetitive, and iterative morphologies. These question the potential of a prototypical object, in this case, a piece of furniture, making certain that no elements other than the object and its integral parts are used to investigate a series of outcomes. Our definitions of the process are based on the following terms: Repetitive Morphologies = actions that are consistent or based on the activities of one person; Non-repetitive Morphologies = actions that are dynamic or move beyond mere repetitive results and are based on multiple inputs such as 2 people rather than 1; Static Morphologies = actions that do not change with consistency, or are considered unsuccessful. Through computer simulations and continuous material investigations, we come to a better understanding of how we can position our object in an environment that is human centered. Befitting the conference, it is heavily influenced by *"learning through interactive design decisions" and the "convergence between natural & artificial systems and the learning process"*.

The results here range from a one-person interaction, to a group of interactions, and offers insight into how this project could work at a larger scale in the built environment. Although there is much to discuss and the methodology associated with this project offers immense speculations for future projects, this particular paper discusses how computational technology merges with materials, and how designers can use this to inform the design process in a more intelligent way. As simulations for the project began to expand, it became necessary to break them down into a series of categories that show how our results could impact the overall design, and to show how the different simulations could affect our decision-making process for future projects, and to show and understand how the simulation could give meaning to our design decisions. In doing this, we are interested in using the computer to assist in making decisions relative to a physical prototype. Trying to simulate a person's state of being, excited, calm, etc., is difficult to do when making a physical model, but much easier and more accessible with a series of digital models. To explore this further, we used a Houdini model to generate patterns for how color could be simulated based upon information gained from the UpMood algorithm, and a Rhino model to explore the visual capacity in the process of different material states such as changes in physical composition as a result of the differences in temperature.

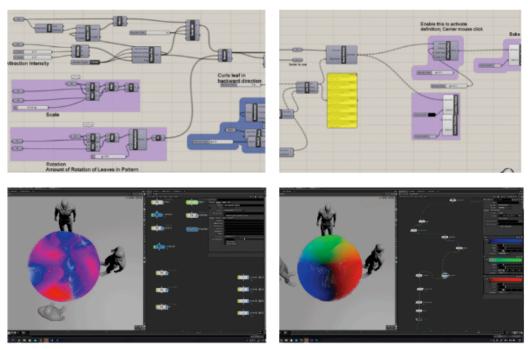


Figure 9: Computational scripting using Rhinoceros, Grasshopper and Houdini. A. Saghafifar. A. Abdelnaby.

The process of design in this process was not something we had experienced before due to the fact that the final version of what we wanted to build was very expensive and time consuming to construct. It required an intense amount of electronic manipulation and conversion of algorithmic data. The digital workflow allowed us to not only visualize before building, but make decisions for how we wanted this expensive prototype to be built in the end which was different compared to a traditional furniture prototype. Also, during the process of designing the interface, it is also difficult to test physically in the beginning. For this project, we felt that in some ways designing the "process", was more important than designing the finished product. There was an ongoing discussion of how the project was working, how it was going to work compared to how it feels when it works.

Repetitive Morphologies are actions that are consistent or based on the activities of one person. Non-repetitive actions are described as an interface with two or more people. This process looks specifically at what happens when one individual is interacting with the table. During this process we began by testing several different kinds of bi-materials including combinations of bi-metal materials along with combinations of metal materials with natural materials such as metal and paper together. The bi-material utilizes in this project refers to a materiality that is composed of two separate metals joined together and consists of layers of different materials that vary in thickness and property. The bi-materials are useful in converting a temperature change into recognizable form displacement, and then changing back to an initial position after the increase in temperature has worn off. The embodied energy of the materials become visual as the energy released/absorbed allows for the displacement to become evident and therefore is very useful in working with temperatures and electronic inputs.

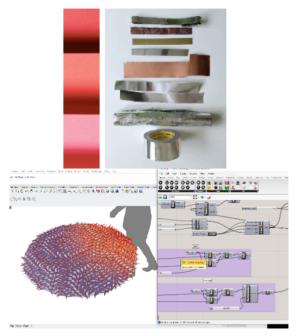


Figure 10, left: Different paper colors and thickness, together with metals used for the bi-material tests. (In the end, a 120 grams red paper was chosen along a 10mm thickness aluminum sheet.) Figure 11, right: Drawing using Rhino and Grasshopper showing the transformation of the bi-material. (The bi-material bent because of differences in the dilatation coefficient of the materials.) A. Saghafifar.

It was apparent that the bi-metal materials were not going to work for this particular project due to the fact that we were unsuccessful laminating the materials together in a consistent way and because of this composition would break down when combined with different temperature variations. Also, the two coefficients of expansion for the bi-metals was attractive in the beginning due to the obvious visual perception the material provided. Examples of this are bending when heated and then returning back to its original state when cooled. In this way, the bi-metals behaved as expected, however, it did not fall into our desired temperature ratios for the way we were designing the heating interface. In the end, the thickness of the various bi-metals was not achievable at the scale of the table in this particular setting.

As we began researching and manufacturing our own material combinations, it became clear that an extremely thin metal combined with special thickness of paper was the most successful in responding to the given criteria. The metal allowed for enough rigidity, and the paper material allowed for a more direct relationship between the thermochromic paint and the temperature differences. The resiliency of the material palette, both in terms of the thermochromic coatings, and the responsiveness of the bi-material was a critical factor. Our studies indicated that 500 watts of potency was enough to achieve our desired outcome but the speed and rate of thermal expansion needed additional ranges to portray the full range of options that the table provided for human interaction. As the table is going to be covered in glass, the glass creates an envelope that works in a range of 500 -1800 watts. At 500 watts the biomaterial starts to move, but it moves in a slower rate. The higher the temperature, the more the metal deforms and the more it is respondent to the temperature. The activation temperature for the thermochromic paint is 30 degrees Celsius.

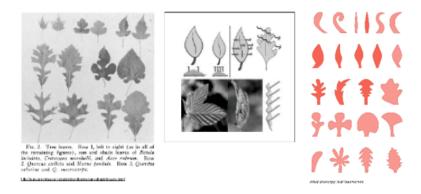


Figure 12, left: Logic studies for the shape of the leaves. Source: http://wegreening.blogspot.com/2016/04/blog-post_28.html and http://www.daadgroup.org/pub/eCAADe%202014%20v2%20-EIA%20-Fio%20250dpi.pdf

Figure 13, right: Initial drawings by the authors explored shape grammars of leaves and how these shapes worked with bending when heated. Decisions were ultimately made regarding the performative qualities of the leaf shapes.

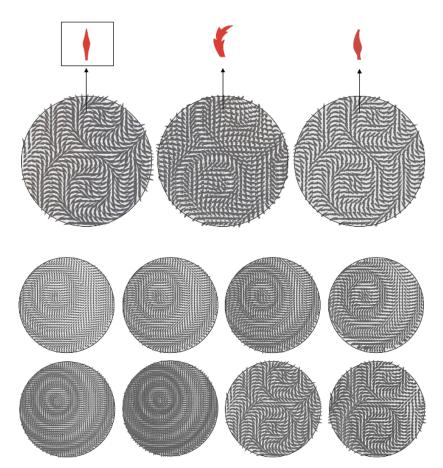
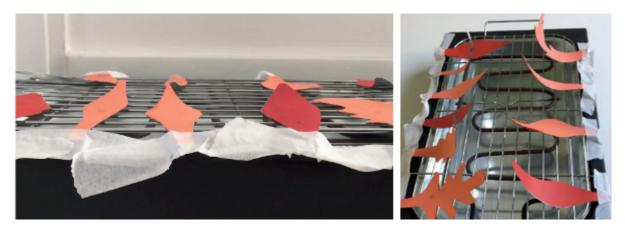


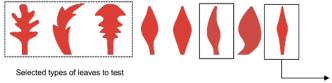
Figure 14: Decisions for leaf profiles based on consistency and compositional patterns with relative size and responding pattern.



Figure 15, left: Electrical resistance coils with different available ranges. Source: https://produto.mercadolivre.com.br/MLB-737802511-2-resistencia-eletrica-caixa-dagua-c-termostato-1-resist-_JM?quantity=1.

Figure 16, right: Ceramic infrared heating, another option for the table prototype. Source: https://www.eletrothermo.com.br/ (Instead of the ceramic & coil resistance, studies indicate the use of graphene could also be successful in future tests.)





More effective morphologies Bending with the heat

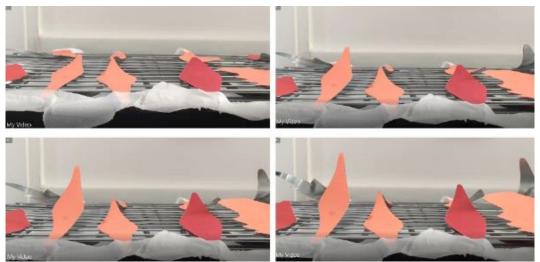


Figure 17, above: Material testing, bending & heating at beginning and end of the test. Subsequently, the decision was made to utilize the morphologies that bended most successfully with heat. Below: Video frames of the leaves bending. (Research indicated 40 seconds for the leaves to bend and 2 minutes for it to return to the initial position.)

The project incorporates Leuco dye, a water-based ink. With this as a coating, colors can change in the presence of temperature variation. This is a phenomenon that certain substances exhibit known as thermochromism. The process is reversible up to 60 degrees, and Irreversible from 60 degrees onward. It allows for the mixing of shades between paints of the same turning point, but in this case, it wasn't mixed. The color intensity in this process depends on the designer's needs, but the weight of the covering (paint coat) should be 2 to 3 times that of a normal paint. The dyes are rarely applied on materials directly; they are usually in the form of microcapsules with the mixture sealed inside. The dyes most commonly used are spirolactones, fluorans, spiropyrans, and fulgides. The acids include bisphenol A, parabens, 1,2,3-triazole derivates, and 4-hydroxycoumarin and act as proton donors, changing the dye molecule between its leuco form and its protonated colored form; stronger acids would make the change irreversible. We found that leuco dyes are available for temperature ranges between about $-5 \degree C (23 \degree F)$ and $60 \degree C (140 \degree F)$.

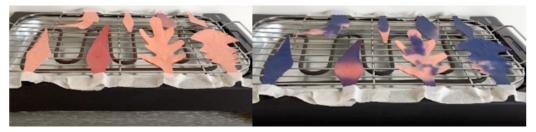


Figure 18: Video frames of the leaves changing colors.



Figure 19: Color palette of leaves based on temperature.

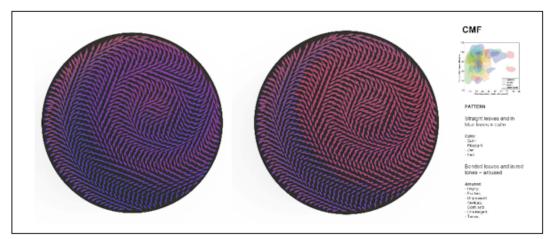


Figure 20: Plan drawings of the table incorporating color change based on temperature.



Figure 21: Drawings of the table incorporating color change based on temperature.

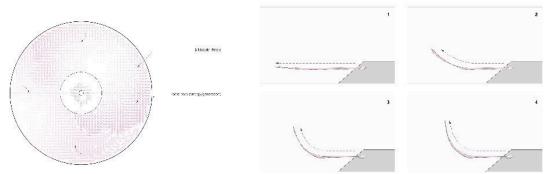


Figure 22, left: Plan drawing of sensory table, with petals bending and changing colors in response to sensory information. Figure 23, right: Diagrams of metal/paper bi-material petals as they respond to heat. A. Sebastian.

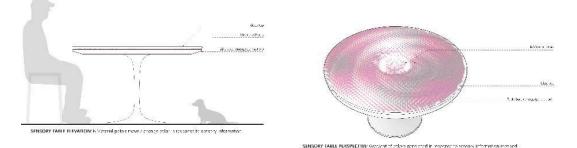


Figure 24: Elevation & perspective drawing of sensory table. A. Sebastian.

Methodologies & Sensorium Technologies

In order to predict the potential overlap between the architectural, the sensorial, and the augmented, we worked with UpMood technologies to begin understanding how to measure and estimate how people might feel or respond in a given environment. To monitor and evaluate how people perceive certain criteria, users wore emotion-sensing bracelets when they visited the project. These collect biodata from the user and result in 11 different emotional states: calm, pleasant, unpleasant, happy, sad, excitement, anxious, confused, challenged, tense. This data was continuously fed into an App that revealed the different states back to the user. The evaluations and the use of these overlapping technologies acted as a way to gain insight into a more profound human experience. Through this process, the project addressed user insight relative to emotional patterns and management.



Figure 25: UpMood technologies (App+bracelet). Source: UpMood.

In the paper, The Nature of Feelings: Evolutionary and Neurobiological Origins, the author Antonio Damasio writes, "Survival depends on a homeostatic range", and "feelings and experiences facilitate the learning of the conditions for homeostatic imbalances plus the anticipation of conditions. Feelings are mental experiences that accompany a change in the body state." He goes on to write that, "external changes displayed in the exteroceptive maps of vision or hearing (sensorium) are perceived, but largely not felt. It can trigger drives or emotions, causing a change in the body state, and subsequently felt." Homeostasis, the tendency towards a relatively stable equilibrium between interdependent elements, especially as maintained by physiological processes, is a big part of human survival, and is relevant to the theories of Damasio. Human survival depends on homeostasis, or the regulation of the body's self-repair and defense. The body can regulate itself without the person having a feeling, or "conscientious experience". However, when the person does have a feeling, and therefore he/she is aware of it, it facilitates the learning of a change in body state for a better prediction of future situations and thus increases behavioral With these concepts in mind, this installation tries to increase felt flexibility. experiences, using the different stimuli to increase senses and also offer a recording of what a user felt to bring about potential self-awareness.

Wearing UpMood bracelets allowed us to monitor different emotional states in real time as we interacted with the project. What we found is that the technology can be sometimes accurate and sometimes surprising indicating that our heart rates change in different ways and can be highly situational. It was an interesting part of our experiments with this project because it allowed us to interact with a user in a way not normally accessed in architectural projects. The conclusions for these findings via UpMood wearable technologies indicate that stable peaks, highs and lows, in experience are crucial to accuracy and variance from person to person can differ. There can also be discrepancies between what the users "thought" they were feeling, and what the technology actually indicated. Fluctuation in experience will also affect the results.

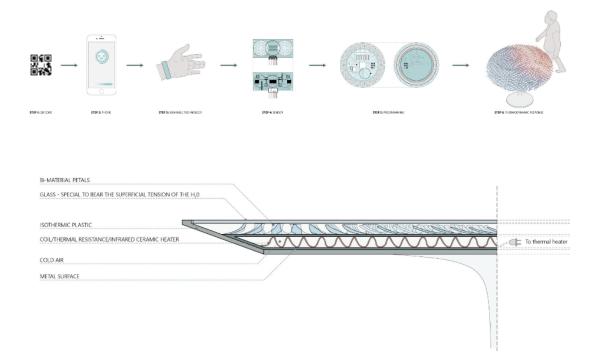




Figure 25: Diagrams of technological integration and table operation. A. Sebastian.

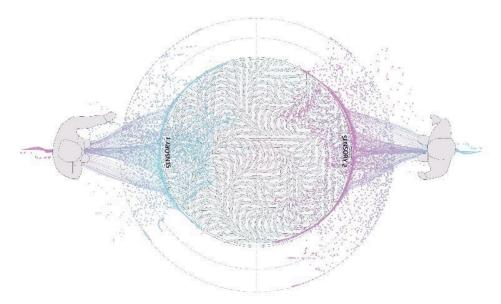


Figure 26: Plan diagram of human/sensor interaction. A. Sebastian.

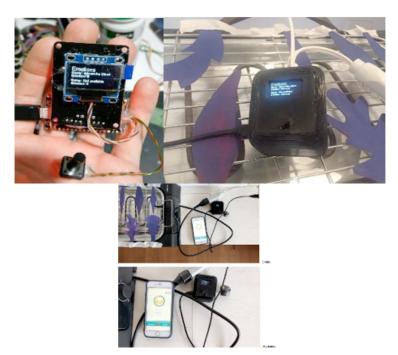


Figure 27: Testing setup, putting technology into play. (In our tests, the table changes its behaviour according to emotions captured by the UpMood bracelets, reacting to two possible states, 'Calm' shown at above-right, and 'Aroused' shown at below-right.

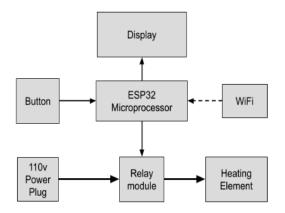


Figure 28: Hardware prototype, table operational diagram.

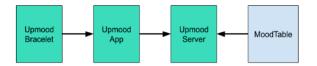


Figure 29: Hardware prototype, table operational diagram.

The table hardware consists of a heating element, a microprocessor with WiFi, a relay module and LCD display, in addition to other auxiliary components. To receive the information, the ESP32 microprocessor from Expressif must be connected to the internet through a WiFi network, which will be used to communicate with the

Upmood server, and firmware updates via OTA must also happen. Once emotions are received from the server by the microprocessor, they are shown on the display and the heating element is activated or deactivated by the relay module. For testing and demonstration purposes, the table also has a manual override mode, where the heating element can be activated or deactivated regardless of the information received by the server. The set described will be referred to as MoodTable

MoodTable changes its behavior according to the emotions captured by the Upmood bracelet, reacting to two possible states, being Calm and Aroused. In order for MoodTable to react to emotions, the Upmood bracelet captures the heartbeat of the person using it, the Upmood App then receives this data and sends it to the Upmood Server, where it is analyzed by the algorithm and translated into emotions. In turn, MoodTable communicates with the Upmood Server through a REST API (see reference images, diagrams), which returns the information of the linked people and their emotional state in JSON format. The entire process happens automatically and, as long as MoodTable is connected to the internet and the App is receiving data from the bracelet and subsequently sending it to the server, the table will react to the emotions of whomever is using it. The two states, "Calm" and "Aroused", which are responsible for activating or deactivating the table are obtained from the grouping of various emotional states captured by the bracelet. The emotional states are as follows:

Calm: Calm; Pleasant; Zen; Sad

Aroused: Happy; Excited; Unpleasant; Anxious; Confused; Challenged; Tense

Therefore, when the emotion captured by the bracelet is defined as "Zen", the table enters the state of "Calm". Although a person's emotions change quickly depending on the situation, from this segmentation by two states, it was possible to have a uniform and consistent response between all emotions within both states.

Conclusions

This paper documents and critiques the process of a furniture project that was designed to induce a sensory experience and ask questions about the capacity to design with technology and a wider taxonomy of choices that can impact our experience in architecture. It explores these concepts relative to digital design and material interactions in the field of bi-material, thermal properties, and the human sensorium. It started by employing typical parametric & computational software, thinking of the potentials between the digital and the real, and incorporated this potential by accepting the role of material manipulation and response to temperature as a way to interact with architectural space and people. The purpose was to engage people sensory experiences that force humans to re-perceive our physical world. The outcomes imply that through research and design, stronger sensorial experiences can be used to increase awareness, perceptibility, and create new design conversations.

The outcome of this particular project at the time of writing is still underway, however what we have learned offers a great deal of input relative to humanizing the design of everyday objects to allow a more heightened experience and relationship between human and object. The use of computer simulations allowed us to begin to predict and forecast how our design could respond to specific levels of human interaction. The use of bi-materials allowed us to create physical and visual responses that relate directly to human interaction, and the role of sensors and wearable technology allow us to further dial in and program the project in a way that illustrates human connectivity and interaction in real time.

One of the most effective approaches towards this topic is defended by Phillipe Starck: to make less: design, material, and energy to end up with more.⁷ In the future people will live in smaller places and they will have fewer things, just keeping the objects that are really important or useful. In that scenario, it is interesting to think about how technology can help us to create meaningful objects, that achieve a deeper level of emotional connection with its users. How a furniture piece enhances verbal and non-verbal communication and stimulates, though technology, cooperation to create a more humanized society?

This piece of furniture has a sensory approach to emphasize the positive aspects of technology and reduce the bad ones. So, it enhances the sensorial channels to provide the users new experiences and to build emotional connections with one another. Furthermore, through non-verbal communication, this table helps people to be open, honest, and integrated, stimulating real and meaningful rapports. In this way, one can understand the other better and have more efficient communication. Consequently, this increases empathy and encourages cooperation.⁸

Acknowledgements

In alphabetical order: Ahmed Abdelnaby, Houdini consultant. Charles Kit Yi Lo, UpMood consultant. Arian Saghafifar, Scripting assistance. Alina Sebastian, Diagramming assistance. All images courtesy of the authors & consultants except where noted.

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Heritage-Inspired Creativity for Textile Printed Pattern: A Case of Sukhothai

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The Europian Conference on Arts & Humanities 2020 Official Conference Proceedings

Abstract

Sukhothai Province Of Thailand Has Been Included To Be A Member Of UNESCO's Creative Cities Network: UCCN For Its Crafts And Folk Art In 2019. And Two Historical Parks Of Sukhothai Were Declared As World Heritage Sites By UNESCO. Therefore Sukhothai Is The Place Where Is Full Of Cultural Heritage And Creativity. The Aim Of This Study Are: (1) To Study Sukhothai's Art And Heritage And Decode Its Cultural Features To Key Characteristics (2) To Interpret Those Key Characteristics To Be Inspirations For The Commercial Textile Printed Design. Methodology: This Participatory Observation Study Started By A Field Visit To Get Information On The Local Culture. Qualitative Data And Inputs Were Used For Thematic Analysis To Get Key Characteristics. Design Developing Process In Six Weeks Design Workshop Is Used For Developing Printed Textile Design. Results: The Analysis Provide 4 Different Design Characteristics, Each In Their Way, Is Composed Of Heritage And Creativity

Key Characteristic 1: Heritage (Ancient Ruins In Si Satchanalai National Park)+ Creativity (The Mood Of Romance)

Key Characteristic 2: Heritage (Ancient Textile)+Creativity (The Modern Ethnic) Key Characteristic 3: Heritage (Golden Jewelry) +Creativity (The Modern Oriental) Key Characteristic 4: Heritage (Wat Srichum's Wall Engraving) +Creativity (The Mood Of Artistic)

Conclusion: Through The Process, The Designs Had Presented The Experience And Results That Reflected The Heritage Resource And Creativity On Textile Printed Design In Different Moods And Tones. All These Designs Can Be Used For Commercial Products In Further Project.

Keywords: Heritage, Creativity, Printed Textile

iafor

Introduction

Sukhothai, The First Kingdom Of Siam (Thailand) In The 13th And 14th Centuries, The Birthplace Of Thai Art, Architecture, And Language. The Province Is Located In The Northern Part Of Thailand Which Has Many Historical Tourist Attractions And Traditions That Are Globally Known. Jirawat P, Patcharin S., Dumrongwoot V., Weerawit C., Natasa (2014) Mentioned That "Sukhothai Has Become Recognized As A World's Cultural Heritage Since 1991. This Recognition Is In Accordance To The Criteria For The Consideration Of World's Heritages, Which Are To Reflect Art Identities Or Beauty, To Be A Masterpiece Of Human Creative Genius, To Be The Unique Empirical Evidence The Identities Of Human Cultures And Traditions Of Civilizations That Used To Prevail Or Are Still Existing"

Moreover, In 2019, Sukhothai Has Been Included Among 66 New Members Of The UNESCO Creative Cities Network (UCCN) As A 'Creative City Of Crafts And Folk Art In The Listing Published On October 30th.Sukhothai Statistical Office Declared The Tourist Amount Traveling To Sukhothai In The Normal Situation Before COVID-19 Are More Than One Million Each Year And Gradually Increase Every Year. The Province Has The Provincial Development Plan Clearly To Designate The Cultural Capital Development Issues (Nitipol, Prashya, Kamonsiri,2020) To Positively Integrate Culture And Innovation Through Proposed Local Schemes And Current Development Plans For Sukhothai Province.

In The Global Market - Local Design Era, Connections Between Culture And Design Have Become Increasingly Close (Lin, Xiansun.,Pingchang, Chingchan, Chen Hsieh, Chinghuang (2007) Designing Local Features Into A Product Appears To Be More And More Important In The Global Market Where Products Are Losing Their Identity Because Of The Similarity In Their Function And Form (Lin Et Al,2007) Cultural Features Can Be Transformed Into Unique And Irreplaceable Product Identities (Yao Chang, Hung Chen And Li Hunag,2011)

Therefore, This Article Intended To Propose How To Transform "Sukhothai Heritage, And Creative Craft And Folk Arts" To Printed Design, And Design These Cultural Features Into Modern Products To Reinforce Their Design Value

Methodology

A Group Of Lectures And Students From 2 Faculty Which Are From Faculty Of Fine And Applied Arts And Faculty Of Public Administration, Dhurakij Pundit University, Thailand Went To Sukhothai For A Site Visit. Participatory Observation And In-Depth Interviews Have Been Used To Gather Information From Those Communities. Thematic Analysis Through Workshop Discussion To Find The Essence Of Sukhothai Cultural Capital Found 4 Points Which Are

- Happiness; Sufficiency, Pride Of Cultural Heritage,
- Meticulousness; Skillfully Artisans, Quality Materials
- Local Wisdom; Unique Identity +New Vision
- Community Lifestyle; Design Blend With Culture

The Essence Of Sukhothai Discussed Above Led The Research Team To Select 4 Different Categories Of Heritage Which Are The Stucco From Architecture, Textile Weaving, Craftsmanship And Fine Arts And Adding Creativity To Build 4 Key Characteristics To Inspire The Modern Printed Textile For Commercial.

The First Category Of Heritage Is The Stucco From Architecture (Ancient Ruins Of Si Satchanalai National Park)

The Information From The Website Of Thailand Official Information Of Government Agencies Described Si Satchanalai National Park As The Park Which Is Maintained By The Fine Arts Department Of Thailand With Help From UNESCO, The Park Has Declared It A World Heritage Site And Attracts Thousands Of Visitors Each Year, Who Marvel At The Ancient Buddha Figures, Palace Buildings And Ruined Temples.

Nang Phaya Temple Or Wat Nang Phaya Is Located On The Main Axis Of Si Satchanalai National Park. It Seems To Be An Important Temple During Ancient Times, But It Does Not Appear On Any Historical Chronicles.

Wat Nang Phaya Is Known As "Monastery Of The Queen" Because Of The Local Legend Tells About Wat Nang Phaya As A Legendary Temple Built By A Princess Named Pasujadeve, Daughter Of A Chinese King Who Became King Phra Ruang's Wife. The King Has A Vague History. So Far, No Evidence Has Been Found To Support This Legend. However, The Temple Is Noted For Its Stucco Ornamentation. (Sirichai, 1982) As It Is The Main Attraction Of This Place, The Well Preserved Floral Stucco Reliefs Are On A Section Of The Viharn's Wall That Is Still Standing. The Exquisite Beauty Of The Stucco Was Mentioned By Many Writers And Poets Through Their Poems Or Books About Romantic Feelings, Emotions, And Catchy.

From The Story Of The Floral And Exquisite Motifs Of Stucco And The Idealistic Legendary Of The Temple, The Research Team Came Up With The Creativity "The Mood Of Romance" To Be A Guideline For The Design Process

Key Characteristic 1

Heritage : Ancient Ruins of Si Satchanalai National Park

Creativity : The mood of romance

The Definition Of Romance In The Cambridge Dictionary Is A Quality Of Excitement Or Mystery Connected With Experience Or Place. Romantic Design Is Mentioned In Leo Van Design Which Is Feminine Décor Elements Are Dominant In The Romantic Style. Some Of The Feminine Décor Characteristics Are Floral Fabrics, Ruffles, Soft Colors, And Textures. Curved Lines And Soft Shapes, They Create Sensuality And Romance In Any Space. The Color Is Soft, Warm, Neutral Tones Or Pastel Colors Are Used In The Romantic Style Ie, Dusty Pink, Light Purple, Lavender, Violet, White, Cream And Red.

The Design Development

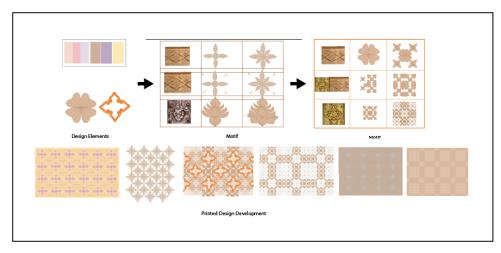


Figure 1: Key Characteristic 1 Design Development

• The Second Category Of Heritage Is Ancient Textile

Si Satchanalai, Sukhothai Has The Local People Called "Tai Phuan". Though Time Passed, Tai Phuan People Still Inherited Culture, Language, Tradition, Festivals And Ways Of Life In The Forms Of Cloth Weaving, But Black Smith And Ordination On Elephant (Sakon, 2014) The Unique Identity Of Tai Phuan In Si Satchanalai's Textile Is Called "Jok 9 Lai" Which Means The 9 Patterns Of Textile Weaving.

Sathorn Gold Textile Museum Is Established By Mr.Sathorn, One Of The Heir Of Tai Phuan Ancestors Who Wants To Conserve And Praise The Wisdom Of Local People. The Museum Exhibits The Complete History And Background Of Ancient Hand-Woven Textile By Tai Phuan People Of Si Satchanalai. These Ancient Textiles Are Unique Hand-Woven Cloth Made By Local Tai Phuan People For Hundreds Of Years And Require High Level Of Skills And Painstaking Attention To Detail. The Cloths Used In Ordination Ceremonies With The Elephants, Wedding Ceremonies, To Worship Holy Spirits And To Spare Good Deeds For Their Next Lives.

From The Story Of The Local Wisdom, Culture And The Painstaking Of Ancestors To Make Unique Identity Of Ancient Textiles Which Are About The Ethnic Style, Then The Research Team Came Up With The Creativity "The Modern Ethnic" To Be A Guideline For Design Process

Key Characteristic 2

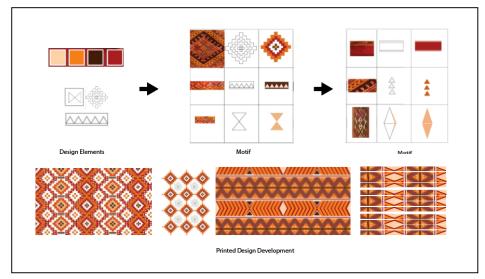
Heritage : Ancient Textile

Creativity : The modern Ethnic

Ethnic Styles Have Evolved Geographically Around Asia And The Pacific, Africa, Latin And Central America, North America, And Europe. Ethnic Style Characterizes A Culture That Celebrates Heritage And Origin. The Style Is Influenced By Factors Such As The Availability Of A Wide Variety Of Materials, Production Methods, Cross-Cultural Influences, Innovations, And Sustainable Practices (Nithyaprakash, 2016)

Modern Ethnic Style Is All About Balancing Texture, Simplicity, Nature, Pattern, And Color. It Is Earthy Meets Modern Minimalism (Modern Ethnic Style, 2016)

Tai Phuan Ancient Textiles Have A Unique Character Of Jok's Pattern. Design Development Has Simplified The Characters Of Jok's Weaving Pattern To Be A Simple Geometric Form. The Color Combination Is From The Color Of Textiles Which Are Red, Orange, Yellow, Brown, Black, Etc. The Repeat Pattern Is Balance And Symmetry As The Design Development Below.



The Design Development

Figure 2: Key Characteristic 1 Design Development

• The Third Category Of Heritage Is Golden Jewelry (Si Satchanalai Golden Jewelry)

Sukhothai Is One Of The Major Production Area Of Traditional Gold Jewelry Products Of Thailand (Jewelry With Identity,2018). In The Past, There Was A Chinese Goldsmith Who Bestowed His Craftsmanship On Local Artisans, Enabling Them To Inherit And Continue The Master Goldsmith's Expertise In Thailand. The Official Website Of Sukhothai Creative City Described That The Beauty Of Sukhothai Ancient Gold Ornaments Has Been Passed On From One Generation To Another. The Identity Of The Ancient Sukhothai Jewelry Still Retains The Artistic And Ancient Style Of Sukhothai As Shown By The Pattern Which Are Found To Be Similar To The Local Temples, Chinaware And Other Natural Design Patterns.

The Golden Jewelry, Not Only Influenced From Chinese Artisan But From The Study It Was Also Found That Sukhothai Goldsmiths Are Also Influenced By Lanna Art And Bagan Art Since The Sukhothai Kingdom Is An Area Near Bagan Kingdom And Lanna Kingdom. As Well As Most Of The Fine Art Works In Sukhothai City Is Influenced By The Ceylon Art, Khmer Art As Well So It Inspired The Develop Of The Antique Golden Jewelry.

The Gold Jewelry Combined The Touch Of The Eastern Or Oriental Art Led The Research Team To Come Up With The Creativity "The Modern Oriental" To Be A Guideline For Design Process

Key Characteristic 3

Heritage : Golden Jewelry

Creativity : The modern oriental

The Orient Is A Term For The East, Traditionally Comprising Anything That Belongs To The Eastern World. The Geographical And Ethno-Cultural Regions Now Known As West Asia, South Asia, East Asia, And Southeast Asia.

Andreea (N.D) Has Described In Asian Inspired Interior Design Online Article About The Modern Oriental Style Decoration Which Normally Has A Touch Of Lively Colors, Circle Motifs Are Important, Visual And Textural Should Be Balance As The Design Process Below

The Design Development

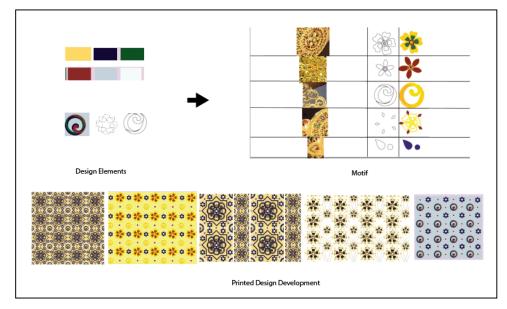


Figure 3: Key Characteristic 1 Design Development

• The Forth Category Of Heritage Is Wat Sri Chum (Sri Chum Temple)

Sri Chum Temple In Sukhothai Is An Important Archeological Site Of Thailand And One Of The Symbols Of Sukhothai Historical Park. The Tunnel Has Been Found Inside Of The Mandapa (The Temple's Central Building) And Has Significant Historical And Cultural Values In Many Aspects. (Chawee, Prittiporn, M.L. Varodom, 2014). The Tunnel Contains A Very Narrow Stairway Which Leads To The Roof Of The Mandapa. In This Stairway, More Than 50 Slates Were Discovered On Which Images From The Life Of Buddha (Jataka) Are Engraved. These Slates Are The Oldest Surviving Examples Of Thai Art Of Drawing (Barend, 2013) Same As Chawee Et Al. (2014) Stated That It Is The Foundation Of The Oldest Thai Painting Ever Discovered. The Wall Paintings And Decoration Features Of Wat Srichum Are Important In Establishing The Uniqueness And Outstanding Importance. (Unesco, N.D)

The Style Of This Oldest Painting Heritage Art Is Different From The Other 3 Characteristics Before. It's Like The Freehand Sketch, Less Formal And Less Elaborate But Still, Needs To Have A Very High Skill Of Engraving. The Research Team Interpreted This To Be The Mood Of Artistic.

Key Characteristic 4

Heritage : Wat Srichum's wall's engraving

Creativity : The Mood of Artistic

From Cambridge Dictionary The Meaning Of Artistic Is Relating To Art, Able To Create Or Enjoy Art, Skillfully And Attractively Made.

Artistic Defined As Someone Who Possess Creative Qualities That Enable That Person To Excel At Producing Creative Works Like Paintings Or Sculptures. Wat Sri Chum Wall's Engraving Is Influenced From Khmer, Bagan And Lanka Art And Chinese Since There Are The Inscriptions Of Floral Bouquet Pattern, Tree And Animal, Jewelry, Ornaments And People. All These Inscription Inspired Designer As The Design Development Below.

The Design Development

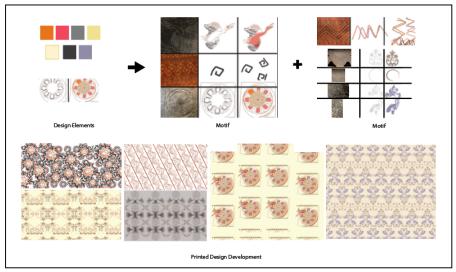


Figure 4: Key Characteristic 1 Design Development

Results

4 Different Design Characteristics Which Are Composed Of Heritage And Creativity On Variety Printed Textiles. Each Characteristic Has Been Picked Up And Put On The Mock Up Fabric To See How It Looks.

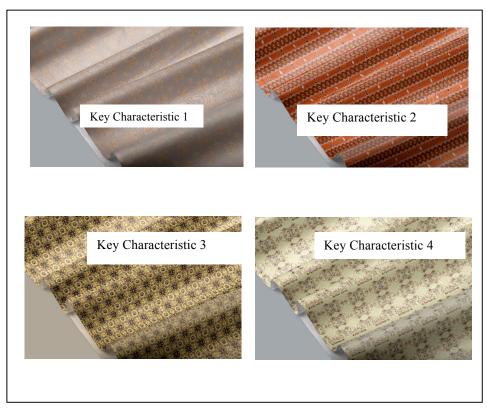


Figure 5: Mock Up Fabric

Conclusion

Through The Process, The Feedback Of The Students From 2 Faculties After Working Together Has Been Issued That The Project Allowed The Students An Opportunity To Study Art And Culture And Ancient Craftsmanship, The Understanding Of The Cultural Capital Can Be Applied In Various Designs. Sharing And Discussing With Friends From Different Faculties Who Have Different Opinions Led Them To Come Up With Various Ideas, For The New Generation, It Can Be Able To Pick Up The Ancestors' Local Lifestyles And Folk Arts To Develop New Designs Whether Products Design, Ornaments, Decorations, Crafts Or Textile Design, Etc.

The Designs In This Project Had Presented The Experience And Results That Reflected The Heritage Resource And Creativity On Textile Printed Design In Different Moods And Tones. All These Designs Have Unique Characters By Taking The Heritage Which Can Be Used For Commercial Products In The Further Project.

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Heritage Inspired Costumes for Thai Traditional Massage Business

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The European Conference on Art & Humanities 2020 Official Conference Proceedings

Abstract

Thai traditional massage has been recently formally added to the intangible cultural heritage list of UNESCO. This health service business has a reputation as top 5 of the world. But the uniforms of masseuse are normally ready-made which had been bought in the market, which has less story communication to raise cultural awareness. Printed textile design can be an option in designing attractive uniform and reflect the cultural heritage without adding too much cost. The aim of this study is to explore how Sukhothai's heritage can inspire Thai traditional massage costumes through printed textiles on apparel. Methods: This participatory observation study started by a field visit to get information on the local culture. Qualitative data and inputs were used for producing the idea sketches. Then, some patterns were selected for designing the print position on apparels based on the three rhythm theories (repetition, radiation, gradation) and scaling. Results : 4 printed textile designs has been put on uniforms in 3 different ways of rhythm theory (repetition, radiation, gradation) to make 12 masseuse uniforms. Conclusion : Sukhothai's historical heritages can be interpreted into the creative printed design which can be used on simple Thai traditional masseuse's uniforms. Not only to create a different mood and tone of apparel but also represent its cultural heritage.

Keywords: Heritage, Masseuse's Uniforms, Printed Textiles

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Introduction

Thai massage ('Nuat Thai') has been inscribed on UNESCO's Representative List of the Intangible Cultural Heritage of Humanity for 2019.

Nuad Thai, traditional Thai massage is regarded as part of the art, science and culture of traditional Thai healthcare. As a non-medicinal remedy and manual therapy, it involves bodily manipulation in which the practitioner helps rebalance the patient's body, energy and structure to treat illnesses believed to be caused by the obstruction of energy flow along 'sen', lines understood to crisscross the human body. This manipulation is intended to normalize the four body elements: earth, water, wind and fire. To open up blocked routes, Nuad Thai therapists perform a combination of manipulations using their hands, elbows, knees and feet, together with herbal hot compresses to reduce inflammation. Presently, Nuad Thai is classified into two main types: Nuad Thai therapy and Nuad Thai for health promotion. Nuad Thai has its roots in self-care in Thai peasant society of the past; every village had massage healers whom villagers would turn to when they had muscle aches from working in the field. Over time, these experiences have evolved into a formal system of knowledge, and Nuad Thai is now an income-generating occupation. In 1985, the Project for the Revitalization of Thai Massage was launched to revitalize and maximize knowledge of Nuad Thai, and an initiative has also been taken to form an alliance of Nuad Thai practitioners who come together annually.



Figure 1: Thai massage ('Nuat Thai') www.legend.travel/thailand-legend-beach-10-days-vacation

According to a survey of uniforms of masseuse in the market, most have a similar design.

The uniforms of masseuse are normally ready-made, which had been bought into the market, and do not communicate to raise cultural awareness.

The Thai fabric used to make uniforms of masseuse in the market is a ready-made fabric that cannot tell the story and values of the local.

Printed textile design can be an option in designing attractive uniform and *this design* reflects the cultural heritage without adding too much cost on production.



Figure 2: Uniforms of masseuse in the market www.ilovespa.net/shop/ilovespashop/

Objective

Explore how Sukhothai's heritage can inspire Thai traditional massage uniforms through printed textiles on apparel.

Design a fabric print pattern that reflects the story of Sukhothai identity, used to tailor the masseuse uniform.

Methodology

• This participatory observation study started by a field visit to get information on the local culture.

• Qualitative data and inputs were used for producing the idea sketches.

• Then some patterns were selected for designing the print position on apparels based on the three rhythm theories (repetition, radiation, gradation)

Observation Study

This study selected Sukhothai as it used to be the capital of Thailand and its ancient history. It is also rich in cultural resources such as architecture, arts and crafts, handicrafts, weaving and gold jewelry making. It will bring information that will be used to develop a pattern for the masseuse uniform It will also be able to show an important identity of Sukhothai.

Sukhothai Historical Park is located in Northern Thailand, in the city Sukhothai, the once great capital of the first truly independent Kingdom of Thailand. The Park is declared as a World Heritage Site by UNESCO and covers the impressive ancient ruins of the old city Sukhothai. The Sukhothai Historical Park is approximately 70 square kilometers big and is divided into five zones. The central zone is the most

popular zone; here you will find the most tourists. Next to the central zone the park also consists of North, East, South and West zones.

In the year 1238 Sukhothai was founded. Sukhothai was the first truly independent Thai Kingdom. Under the lead of King Ramkhamhaeng the Kingdom enjoyed a golden age and its capital became a very important center regarding politics and religion. King Ramkhamhaeng was Thailand's first great king, some of his great deeds were the creation of the Thai alphabet and the establishment of Theraveda Buddhism as the nation religion. Unfortunately the golden age lasted until the 15th century, because after that time the rising city of Ayutthaya became Thailand's capital.

Sukhothai province has always given its importance to the development of national politics and local communities. The policy would focus on solving problems and improving the life quality of every Thai by engaging all participants. This is achieved by integrating with Thailand's 4.0 policy aiming in restructuring the national economic structure in order to upgrade and raise the country to become a creative and innovative producer. In doing so, the available and existing knowledges and local wisdoms are effectively utilized to generate revenues and at the same time to develop and improve the skills of local people towards prosperity and sustainability.

Thematic analysis through workshop discussion to find the essence of Sukhothai cultural capital found four (4) points which are:

- Happiness; Sufficiency, pride of Cultural Heritage,
- Meticulousness; skillfully artisans, quality materials
- Local wisdom; Unique identity + new vision
- Community lifestyle; design blend with culture

The essence of Sukhothai discussed above led the research team to select four (4) different categories of heritage which are the stucco from architecture, textile weaving, craftsmanship and fine arts and adding creativity to build four (4) key characteristics to inspire the modern printed textile for commercial.

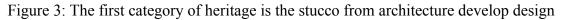
The first category of heritage is the stucco from architecture (Ancient Ruins of Si Satchanalai National Park)

Si Satchanalai National Park: The park is maintained by the Fine Arts Department of Thailand with help from UNESCO, which has declared it a World Heritage Site. This park attracts thousands of visitors each year, who marvel at the ancient Buddha figures, palace buildings and ruined temples.

Nang Phaya Temple or Wat Nang Phaya is located on the main axis of Si Satchanalai. It should be an important temple during ancient times, but it does not appear on any historical chronicles.

The designs shown below are inspired by the floral pattern of the stucco wall in Nang Phaya Temple. The complex floral design on the wall are simplified and new colours are utilized to convey romance and love.





The second category of heritage is ancient textile

Si Satchanalai, Sukhothai has the local people called "Tai Phuan". Though time has passed, Tai Phuan people still inherited culture, language, tradition, festivals and ways of life in the forms of cloth weaving, blacksmith and ordination on elephant (Sakon K.,2014). The unique identity of Tai Phuan in Si Satchanalai's textile is called "Jok 9 Lai" which means the 9 patterns of textile weaving.

The designs shown below are inspired by Tai Phuan textile called Jok 9 Lai. The geometric patterns innate in these textiles are rearranged. Lively colours are added for a more modern looking design.



Figure 4: The second category of heritage is ancient textile develop design

The third category of heritage is golden jewelry

Si Satchanalai golden jewelry Sukhothai is one of the major production area of traditional gold jewelry products of Thailand, (Asean Gem&Jewelry review issue2/2018). In the past there was a Chinese goldsmith who bestowed his craftsmanship on local artisans, enabling them to inherit and continue the master goldsmith's expertise in Thailand. (luxurysocietyasia.com). The beauty of Sukhothai ancient gold ornaments has been passed on from one generation to another. The identity of the ancient Sukhothai jewelry still retains the artistic and ancient style of Sukhothai as shown by the pattern which are found to be similar to the local temples, chinaware and other natural design patterns.

These designs are derived from the gold jewelry of Si Satchanalai. The design concept comes from the intricate Oriental patterns of gold jewelry but simplified for a more contemporary approach using yellow as base colour with shades of blue, green and red.



Figure 5: The third category of heritage is golden jewelry develop design

The fourth category of heritage is Wat Sri Chum (Sri Chum Temple)

Sri Chum temple in Sukhothai is an important archeological site of Thailand and one of the symbols of Sukhothai historical park. The tunnel has been found inside of the Mandapa (the temple's central building) and has significant historical and cultural values in many aspects. (C. Busayarat, P. Lopkerd and M.L. V. Suksawaddi, 2014)

Bringing the uniqueness of Wat Si Chum's walls that are unique by itself, the designs below in order to express artistry have the appearance of free hand drawings of religion figures and incorporating a worn-out texture of colours on the fabric



Figure 6: The fourth category of heritage is Wat Sri Chum develop design

Theory apparel design

In the development of printed fabric patterns for the masseuse uniform, three (3) design theories were chosen to create different and exotic patterns in the development as a masseur uniform.

Repetition

Repeating the same element at a set interval. For example, repeating a certain shape or a colour at a regular interval counts as repetition in design.

Gradation

Visual technique of gradually transitioning from one colour hue to another, or from one shade to another, or one texture to another. Space, distance, atmosphere, volume, and curved or rounded forms are some of the visual effects created with this technique.

Radiation

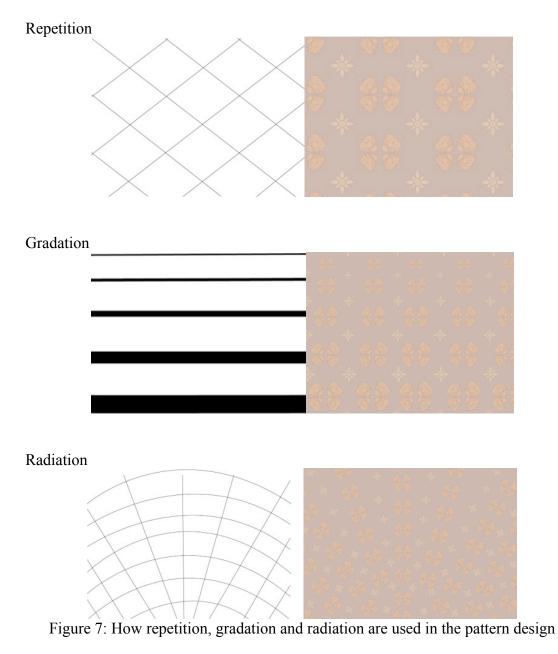
Created when lines, shapes or designs emerging from a central point resulting in the design being an equal distance from that point.

Design Process

After receiving the patterns from the four (4) key characteristics, then developing the designs with the three (3) design principles.

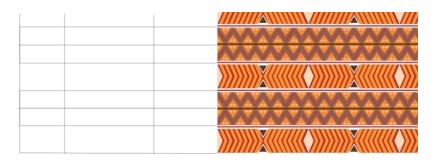
The development of the pattern begins with the drawing of the pattern from the three principles, then for repetition, the pattern is placed and then repeated close to the original pattern. For gradation, the size of the pattern is changed from small to large in a vertical position. And for radiation, the implementation of the distribution of patterns from the center outwards or towards the outside.

Characteristic 1 Heritage stucco from Ancient Ruins of Si Satchanalai National Park



Characteristic 2 Heritage ancient textile

Repetitio



Gradation

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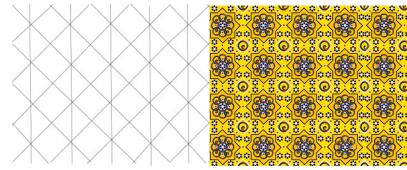
Radiation

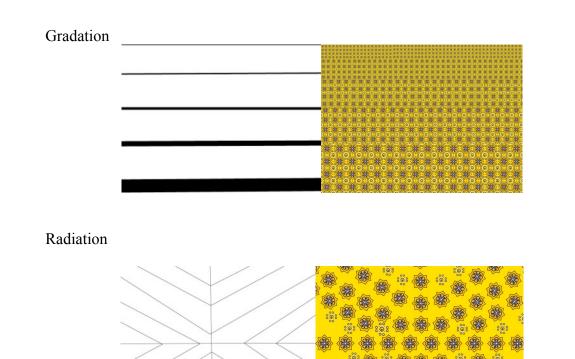


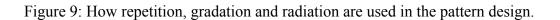
Figure 8: How repetition, gradation and radiation are used in the pattern design.

Characteristic 3 Heritage golden jewelry Si Satchanalai

Repetition







Characteristic 4 Heritage Wat Sri Chum

Repetition



Gradation



Radiation

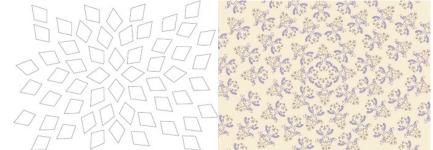


Figure 10: How repetition, gradation and radiation are used in the pattern design.

Results

Results from the study brings to four (4) key characteristics in three (3) different ways of theory apparel design (repetition, radiation, gradation) to make twelve (12) patterns, as shown below.

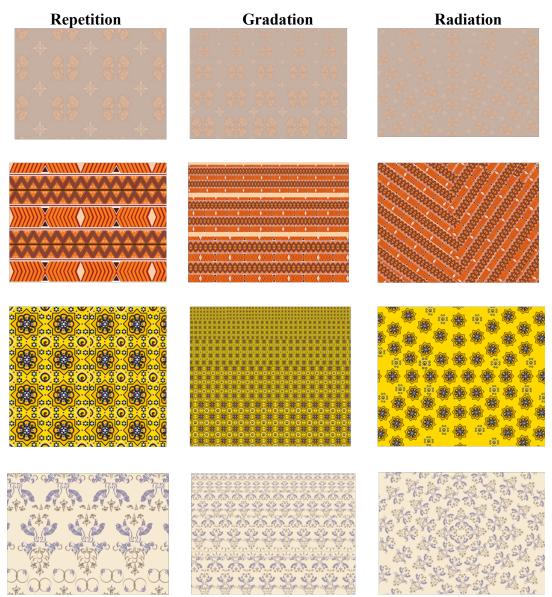


Figure 11: Twelve print textile Pattern three different ways of theory apparel design

Conclusion

Sukhothai's historical heritages can be interpreted into the creative printed design which can be used on simple Thai traditional masseuse's uniforms. Not only to create a different mood and tone of apparel but also represent its cultural heritage.

CHARACTERISTIC 1

Figure 12: How repetition, gradation and radiation are used in the uniform design.



Figure 13: How repetition, gradation and radiation are used in the uniform design.



Figure 14: How repetition, gradation and radiation are used in the uniform design.



Figure 15: How repetition, gradation and radiation are used in the uniform design.

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Understanding the Mauritian Kitchen through Primary and Secondary Sources

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Abstract

The kitchen is the multifunctional space in a home where family and friends spend quality time to prepare food, cook, eat as well as discuss daily things and most importantly create strategies for the future. The evolution of the kitchen in Mauritius is very complex given the complexity of the population itself and to better understand this issue, the primary and secondary sources compiled by the Mauritian Heritage Funds (Appravasi Ghat, MGI Folk Museum and Le Morne – Trou Chennile Village) depicting the life of slaves, labourers, and traders, who brought their tangible and intangible heritage, were extensively studied. In addition, to understand the transition of Mauritians from the silent and the baby boomers' generation, a qualitative study using the snowball sampling method on 22 participants aged between 55 and 95 years was conducted. Elders from both rural and urban areas of the north, south, east, center, and west of Mauritius were targeted to conduct this study. Their kitchen histories and adjustments done over the years in the kitchens were recorded and transcribed during face-to-face interviews. The results show that many have maintained the traditional methods and elements of cooking such as the 'roche cari', 'foyer', and 'rechaud' against all odds and others have reluctantly migrated to "so called" modern kitchen but still have countless memories of these items.

Keywords: Elderly, History, Kitchen, Mauritius

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Introduction

In Mauritian families, the kitchen has always been multi-functional and a space where the "real manager" of the family, the mother, could easily be found. The kitchen is thus considered as being the heart of the home, usually a warm and cozy gathering place where friends and family gather daily or occasionally to prepare food, help the kids with homework and discuss important topics. Hence, it should always be outfitted with lively hues to make it as much livable as it is functional. The kitchen mainly revolves around the work triangle (sink, refrigerator, and stove); the cabinets that store food goods, dinnerware, pots and pans, tableware and cooking utensils; the shelves, the floor tiles, the lighting, the backsplash and the countertop. This multifaceted room remaining mostly the women's main area (Hema & Sidhu, 2011; Mahajan & Patwardhan, 2015) also extends its presence in all houses be it the culture. Each kitchen has a different story: from classic kitchens to smart and ergonomic ones that include technologies to boost the efficiency, convenience, and productivity. Kitchen remodeling can also be nerve-wracking due to the myriad of choices involving the aesthetic and practical reasons, as well as budget constraints.

Mauritius has transitioned from being a mono-crop low-income African country to a high income one. The ethnic diversity of the 1,265,985 inhabitants (Mauritius, 2019) from different ancestral origins reflects not only in the cuisine, but also in the dressing style, art and literature, as well as in the beliefs and faiths. The Mauritian kitchen history is quite different from the rest of the world. The arrival of slaves and indentured labourers (Mishra, 2009) brought in different kitchen items and accessories to facilitate daily meal preparation either in the morning prior going for work or in the evening for dinner. Today, it is a complex environment where individuals interact with electronic appliances during food preparation (Martin et al., 2016). The types of meals prepared were adapted to the types of work performed by the population concerned e.g. a labourer will have heavy meal consisting of rice or pharata and curry early in the morning before leaving for work.

Mauritian elderly actually makes 16.6% of the 1.3 million citizens and is expected to rise further in the next few decades. They are our sole connection to the past and to our origins and have transferred both tangible and intangible cultural heritage for us to be emerged as Mauritians. Ancestors also brought their wisdom, their memories, their experiences, and their history which survived the harsh working conditions under the Dutch, French and British colonization periods.

Understanding the Mauritian history as well as the past kitchens through secondary sources was helpful but through primary sources, empathy can be the turning point in discovering the kitchen. This paper deals with a section of a project titled "*Transforming the kitchen of the elderly people of Mauritius for an easier life: Inclusive Design*", and initially investigates the history of the Indian immigrants and the maroons on bequeathing their native culinary culture to the current generation. Secondly, through open-ended questions, selected older adults are interviewed about their lifetime kitchen experience after ethical clearance approval from the University of Mauritius ethical committee.

1. Mauritian Kitchen History - Indian Immigrants and Slave Heritage

Mauritius during the 17th, 18th and 19th centuries has witnessed the tangible and intangible cultural heritage brought by the slaves, indentured labourers, and traders. Some historical places depicted in Figure 1 that marked their presence are as follows: The Appravasi Ghat (red dot) symbolizes the place where the 'girmityas' climbed the symbolic sixteen (16) steps to enter Mauritius; the Folk Museum (green dot) disseminates the cultural heritage of the Indian Immigrants and Le Morne (blue dot) symbolizes the commemoration of Abolition of Slavery. The Government of Mauritius has earmarked these landmark regions to highlight the contribution of slaves/indentured labourers/ traders the creation of modern Mauritius and some additional information are given in the next section.

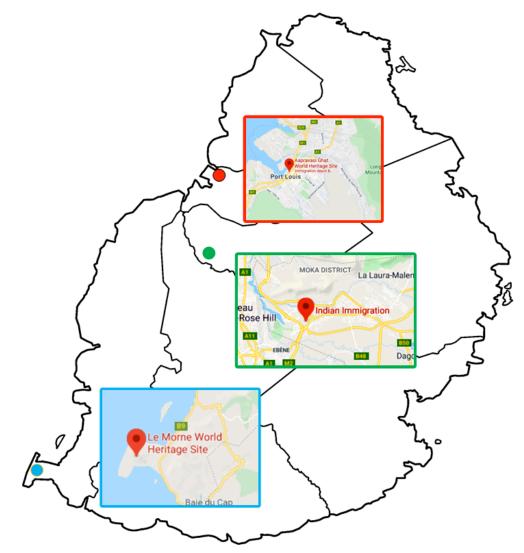


Figure 1: Locations of Historical Places

1.1 Appravasi Ghat

The Appravasi Ghat (1849) inscribed in June 2006 as a UNESCO World Heritage Site is an Immigration Depot located in Port-Louis, Mauritius. This historical site previously known as the 'Coolie Ghat' witnessed the beginning of the modern indentured labour diaspora by being their first point of contact(Swift, 2007) with the island. Between 1853 and 1859, the Depot was expanded and improved to accommodate 600 immigrants. 97.5% of the Indian indentured immigrants (Teelock, 2018) came from Bihar, Bengal, Uttar Pradesh, Karnataka, Tamil Nadu, Kerala, Andhra Pradesh, and Maharashtra to work in the sugar estates. Upon arrival, they stayed in sheds for two days in the Depot to complete administrative procedures and prepared meals in the Immigrants kitchen (Figure 2).



Figure 2: Immigrants Kitchen (Past cooking area v/s Restored cooking area)¹

Later, immigrants were marched to sugar estates where they stayed in 'camps' consisting of long rows of huts built with wood and straw (Figure 3(a)) and barracks (Figure 3(b)). Their kitchens located in a sort of veranda outside the huts, consisted of hearth stones for preparing pharata, roti, rice, kasar, curry, kheer, dahi, matha (butter milk), and tea as well as drying clothes and newborn care. There was a garden to grow vegetables (taro, breadfruit, cassava)(Bhurosy & Jeewon, 2016) and medicinal plants as well as sheds for the goats and cows.



Figure 3: (a) Row of huts; (b) The Old Labourer's Quarters of Trianon²

¹ Source: Mr. Satyendra Peerthum - Appravasi Ghat Trust Fund (AGTF) Collection

² Source: http://vintagemauritius.org/culture/trianon-old-labourers-quarters/

1.2 MGI Folk Museum

This Folk Museum inaugurated in 2017 focuses on some people who fought for the cause of Indian immigrants namely, Adolphe de Plevitz, Mohandas Karamchand Gandhi, and Manilall Doctor. The museum hosts the kitchen items, clothes, agricultural tools used by immigrants as well as a school (baitka) made using straw.

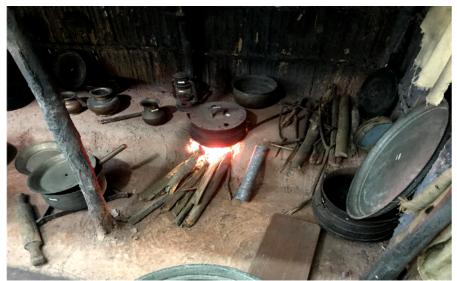


Figure 4: Collection of cooking utensils/items (Courtesy: MGI Folk Museum)

Some of the kitchen items/cooking tools shown in Figure 4, on display at the Beekrumsingh Ramlallah Interpretation Centre (BRIC) and the Folk Museum are as follows: Janta, Marmite, Dal Ghotni, Caraille (Kadhahi), Senni, Roche cari (Silbatta/silora), Hokri Mousar, Chawki-belna, Attukal, Ghara, Rechaud (Resso), Foyer (Chulha), Tawa, Katori, Tharia, Lotah, and Gilass. A pictorial representation with the English equivalent name of each kitchen item is shown in the Appendix.

1.3 Le Morne

Le Morne (Boswell, 2005) is also a UNESCO world heritage site proclaimed National Heritage on 24th January 2006. Located on the South side of Le Morne Brabant mountain, it served as a shelter by maroons (runaway slaves) (Eichmann, 2012; Owadally, 2009) from East African countries like Comoros, Madagascar, Mozambique, Senegal, Tanzania, and Yemen. It is the living example of the people who fought to be independent, free, and respected for their values and cultures. Ethnographic studies(N. Gopauloo, Essoo, & Panyandee, 2010) conducted by the Le Morne Heritage Trust Fund with the natives of Le Morne (Trou-Chenille), and neighboring villages revealed through an oral interview the following points:

1. Houses of Trou-Chenille were square shaped straw huts and triangular shaped sheds.

2. The maize mill (Stone mill) and the coffee pounder were regularly used to make maize powder and ground coffee. The staple food was primarily maize powder and inhabitants used to mix rice with maize to make "du riz maille", maize soup, maize cake, as well as pancakes made with flour and banana. Wood fire or "four di son" also known as compacted sawdust in the form of a log.

3. Most maroons owned vegetable gardens where they grew manioc, maize, sweet potato, and songe root. They also reared poultry, pigs and hunted for hare, wild boar, deer, and "tang".

2. Overview of Participants' Profile and Background

The Mauritian culture (Maurer, 2015) has emerged through the diverse religious landscape such as the temples, shrines, mosques, pagodas and churches that can be seen all throughout the island. The Hindus constitute around 52%, the Christians around 28.3%, the Muslims around 16.6% and people from other religion around 3.1% of the population (Wiafe-Amoako, 2019). Twenty-two (22) participants were chosen using the snowball effect with the help of the University of 3rd Age of Mauritius (U3AM). Proper attention was given to ensure that selection was made from people coming from the different cultural and religious background so as to get a true picture of the evolution of the kitchen in each person's life. The director of U3AM helped in identifying the participants as well as conducting the interviews to ensure that the elders feel secure and confident to share their personal experience freely during the oral interview.

3.0 Kitchen History of Participants

The Mauritian kitchen history is quite different from the rest of the world because of its blend of cultures and richly mixed cuisine. This plethora of cuisine grew during the 1930s from an unorganized cooking space with meal preparation being done on the floor to a 'foyer' placed on a worktop, until came the structured kitchen with zones pertaining to specific tasks. Cooking for heavy meals (rice, pharata, and curry) was mainly done on the foyer in contrast to preparing light meals on the primus or the rechaud, which allowed the space to multitask conveniently. The use of concrete sinks placed next to the foyer/rechaud/primus stove within the kitchen space occurred much later in comparison to the initial days when utensils were cleaned/washed outside the huts/wooden houses. The beginning of the 1940s brought major challenges for the inhabitants of Mauritius in terms of housing, kitchen accessories, and water distribution. For a better overview, the happenings lived by the inhabitants during the period 1940s to 1970s are illustrated in the subsections.

3.1 Housing

From 1945 to 1975, the British Government together with the Mauritian Government, the private sector, and the sugar industry constructed Industrial Estates, *"Dépendances"* houses such as little huts made of thatched roofs to accommodate the labourers recruited for working in the plantations. Between 1945 and 1955, a total of 1,000 units of those type of houses werebuilt and rented to house the employees along with their family. During that period, most of the participants in the survey rented small straw huts, iron sheets and wooden houses shown in Figure 5.



Figure 5: Straw huts (AGTF) and Iron Sheet-Wooden Houses

Between 1963 and 1991, the Mauritian Government in partnership with the British Government developed and constructed a new housing model called the EDC (European Development Community) houses (Figure 6) in the southern part of Mauritius. The materials used to construct the EDC houses were mainly concrete slabs, iron sheets roofs, and asbestos panels; these houses were rented at a low cost to those who could not afford a house.



Figure 6: EDC House³

However, the EDC houses were not constructed with any proper infrastructures such as road, water distribution, sewage or indoor facilities such as the kitchen and toilet. Two participants modestly rented EDC houses for approximately 19 years, since 1974. One of the participant's husband had constructed a wooden kitchen with a concrete floor and a small concrete sink outside the EDC house while the other participant converted one of the rooms into a kitchen.

³ Source: https://www.lexpress.mu/article/maisons-edc-des-milliers-de-mauriciens-vivent-toujours-encontact-avec-de-l%E2%80%99amiante

3.2 Preparing and Cooking of food

In the 1940s, food had to be cooked outside in the open on a "*foyer*" by placing and joining three blocks together on the ground to form a triangular wooden fireplace (Figure 7(a)). The cooking pot was then placed on top of the blocks to cook food. One participant living in Curepipe narrated:

I had to find small bamboo sticks to mix up with the wooden sticks as during winter it was very tough to light the woods in the 'foyer'.

Another participant who was living in Reduit stated:

My sister and I accompanied our grandmother to cut and carry piles of wood. We placed them on our head while walking back home.



Figure 7: (a) Foyer, (b) Rechaud⁴, and (c) Petroleum Stove⁵

During the 1950s, cooking was also done using the charcoal stove also known as "rechaud" or the coal pot (Figure 7(b)) as well as the primus stove (Figure 7(c)) that had a small circular tank at the bottom in which either kerosene or fuel was poured to light the stove. During the nineteenth century, the "*Roche Cari*" (Figure 8(b)), a thick and flat rectangular mortar, was introduced by the Indian immigrants in Mauritius and it was used by all Mauritians at that time irrespective of their ethnicity to crush and mix their spices.



It was fixed in concrete/ bricks installed outside the house. Thin channels were also drawn on the slab/mortar surface to keep the spices/dough on the mortar. The "*Baba Roche Cari*", a small cylindrical roller of around thirty centimeters made from cut stone was used to pound, grind, and crush various combinations of spices on the mortar to obtain an aromatic paste. In fact, even today the "*Roche Cari*" has a special place in the culinary heritage of Mauritius.

Figure 8: 'Roche Cari (Courtesy: AGTF and MGI Folk Museum)

⁴ Source: https://ghanagogo.wordpress.com/2018/06/14/firewood-and-charcoal/

⁵ Courtesy: AGTF (BRIC)

Indians immigrants also brought the stone mill (Figure 9(a)) and the wooden mortarpestle (Figure 9(b)) in Mauritius to grind wheat for making flour, rice for making ground rice and corn for making corn powder to cook traditional Indian cakes.



Figure 9: (a) Stone mill and (b) Wooden mortar – pestle (Courtesy: MGI Museum ad AGTF)

Likewise, in the mid-19th century, the Indian immigrants brought the 'c*araille*', which is a deep cooking pot made of heavy cast iron (now available in aluminum also) in the form of a hemisphere and equipped with two metal handles for handling. The 'c*araille*' (Figure 10) was used by all the participants to cook food at that time. In the 1960s, most kitchen utensils used were in enamel where people could use them for one whole year as they were durable.



Figure 10: 'Caraille'

One participant living at Curepipe stated that

"Each year my mother would buy new enamel vessels from the mobile kitchen utensils sellers and we threw the broken vessels".

During that period, there was no malls or supermarkets. One could purchase commodities either from the nearby small shops, or from mobile hawkers or street vendors.

The mobile sellers overloaded their bicycles with items and would then roam the streets of their regions to find interested buyers. They normally sold fresh milk (Figure 11(a)), newspapers, coal for cooking food, kitchen utensils (Figure 11(b, c)), clothes, and tin cans. The advantages of buying from these hawkers were the low prices and delivery was at the door-step itself.

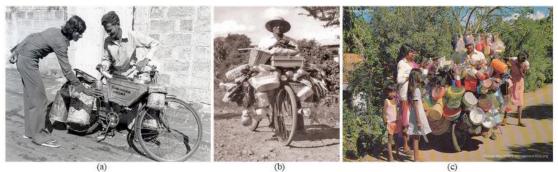


Figure 11: (a) Milkman⁶ and (b) Mobile kitchen item seller in $1960s^7/(c)$ 1989⁸

Another important kitchen utensil introduced in the late 1930s by the Chinese in Mauritius was the Chinese wok (Figure 12). During that era, only the Chinese used the wok for cooking but with time, the latter became a commonly used kitchen utensil by all inhabitants. From 1940 to 1970, none of the participants could afford a refrigerator. All the participants' family harvested fruits/vegetables in their courtyard. One participant's father who was a farmer, sold vegetables to the hospital for a better income. Meat was rarely eaten as only people who bred animals such as hens, ducks, goats, pigs, and rabbits in their yard could afford at that time. From the survey, only four participants reared hens, ducks, and pigs.



Figure 12: Wok (Courtesy: Chinese participant)

⁶ Source: http://vintagemauritius.org/culture/mobile-kitchen-utensils-seller-marchand-mercerie-1989/#jp-carousel-1817

⁷ Source: http://vintagemauritius.org/culture/mobile-kitchen-utensils-seller-marchand-mercerie-1989/#jp-carousel-1818

⁸ Source: http://vintagemauritius.org/culture/mobile-kitchen-utensils-seller-marchand-mercerie-1989/

During that epoch, the small straw or iron sheets kitchen was separated from the house and only one person could get inside to cook food. The lack of space forced one participant and her family members to sit on a mat outside the kitchen to have food. The kitchen was not even equipped with shelves, table and chair. Nearly all the participants' husbands helped to furnish the kitchen by building wooden shelves, cupboards, concrete sink, wooden table, and chairs. Moreover, ashes and charcoal were used as cleanser to wash the kitchen utensils.



Furthermore, there was no water distribution to individual houses. Most of the participants had to queue up to fetch water from the Public Government tap placed all around the regions (Figure 13). Two participants living near the river used to fetch water in small buckets to fill barrels, which they later used for domestic purposes.

Figure 13: Government Tap (Petit-Raffray)

4.0 Present Kitchen of Participants

In the early 1990s, nearly all the EDC houses were repealed and replaced with concrete new houses inclusive of a kitchen having proper water, sewage, and electricity distribution. In the year 1993, the two participants who rented the EDC houses demolished them to construct concrete houses. From 1975 to 1990, the government started improving the housing estates by providing the habitants with proper water and electricity connection.

As from 1975, the Mauritian economy started to take off and with the help of the Government proper infrastructure such as housing, water, electricity, sewage system and tarred roads were built. Moreover, the family income grew with both partners working to accommodate the basic necessities. New domestic equipment such as the electrical and gas oven and other accessories were bought to facilitate work in the kitchen. Along with new equipment, the kitchen floors and table tops were fitted with tiles and other decorative items in the mid 1980's.

Preparing and Cooking of food

Nowadays, preparing and cooking food has become easier with the electronic appliances shown in Figure 14. There is no need to cut wood or buy charcoal to cook food as in the past. All the participants have the gas oven and some of them even have both the gas stove and the oven. From the survey, only one participant did not have a microwave, but she mentioned not having one didn't matter as she heated her food on the gas stove itself.



Figure 14: Modern Kitchen (Courtesy: Participant)

Moreover, now the big stone mill is no longer seen and used while the big wooden mortar along with its wooden pestle have been replaced with a smaller version of the mortar and pestle, which is either made of stone or wood. Nearly all the participants have one in their kitchen to crush garlic, ginger, and other condiments. 75% participants still use their "Roche Cari" to crush and mix their spices despite having an electronic mixer and grinder at home. Moreover, the "Roche Cari" can still be seen in all their courtyard even though five of them do not use it now due to back pain or hand pain. The "caraille" and the Chinese wok are still used in the kitchen, but of course, new and more practical cookware that allow non-stick cooking (Figure 15) are fabricated using materials such as the aluminum, stainless steel, Teflon, and ceramic. With the construction of malls and supermarkets all around the country, the mobile kitchen utensils sellers have completely disappeared. All the participants now travel either by bus or their own car to buy their kitchen utensils and groceries in the nearby supermarkets and hypermarkets. Moreover, enamel kitchen vessels have disappeared from the market and only kitchen vessels made of plastic, glass, aluminum, stainless steel, and silicone are available. The major change was all participants had refrigerators to store their vegetables, fish, and meat.



Figure 15: Non-sticky cooking vessels⁹

While the majority kept up with harvesting vegetables and breeding animals, only one participant continued growing only leafy vegetables and herbs like the watercress, mint leaves, leeks, and scallions for daily use. Moreover, the size of the kitchen has definitely changed. Kitchens are now more spacious and can easily accommodate two to more persons to help and eat. From the survey, twenty-one (21) participants

⁹ Source: https://361.mu/product/set-of-15-pieces-tefal-setp15/

had a small kitchen and accommodated two persons as compared to only one participant having a more spacious one. Only one participant had a very small kitchen where she could only prepare and cook her food. Her family had to have meals elsewhere and even her refrigerator was placed in another room due to lack of space. Moreover, it was observed that all the participants had proper wooden shelves, cabinets, and cupboards to store their groceries, and kitchen utensils.

Liquid dish soap with sponge and dishwashers have replaced the use of charcoal, ashes and coconut coir. All houses now have proper water connection. However, only one participant complained about water supply cuts at some point in time at her place. Therefore, she stored water in buckets in the kitchen for later use when preparing/cooking food, and doing the dishes. Some kitchens are fitted with dish washing machines but often these are not designed for the traditional cookware used by the Mauritian families.

5.0 Conclusion

Over time, the kitchen being an active area has become spacious with more social interactions apart from only having meals. Transitioning from the ancient kitchen where the ancestors prepared meals right outside their houses to modern ones fitted inside the house through decades with the addition of new technologies has been fascinating. It is commendable to see how the Heritage Trust Funds of the Mauritian government have preserved or restored the old kitchens. The conducted interview also concluded how even today many elders still maintain the traditional means of cooking and have a small kitchen with basic amenities right outside their houses. Changing meal preparation techniques have throughout their lives given them lots of kitchen routines, knowledge and skills. Hence, when designing their kitchens, designers must consider their needs to ensure maximum comfort in terms of safety, ergonomics and use of technologies. The future works of this project requires interviewing more Mauritian elders, conducting role-play as well as anthropometric data collection for the product and the modular kitchen design adapted to Mauritian Elders.

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Appendix:

Traditional Kitchen Tools and Items	Given name	English equivalent
MAE IN PROPERTY	Marmite	Traditional crockery casserole vessel
	Dal Ghotni	Wooden hand masher
	Senni	Large pandanus leaf (vacoas)/copper/aluminium/stainless steel serving tray
	Attukal	Stone mill
	Ghara	Earthen pot
	Tawa	Flat or concave disc-shaped frying pan

Katori	Bowl
Tharia	Round platter
Chawki- belna	Rolling board-rolling pin
Lotah	Globular water container
Gilass	Steel/Copper Glass

Can Volunteering Choices Reflect Job Expectations? – Motivational Impact of Perceived Self-Sufficiency and Personal Religious Beliefs

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Abstract

In this paper we set out to explore the impact of perceived self-sufficiency and personal religious beliefs on the connection between motivation to volunteer (VFI) as theorized by Clary and Snyder (1998) and job expectations which students possess before entering the workforce for the first time. Our goal is to find out the relation between six personal and social functions (values, understanding, social, career, protective and enhancement) potentially served by volunteering and students' first job expectations, while controlling for psychological variables of perceived self-sufficiency (locus of control) and religiousness. Our sample is composed of 130 Croatian and international students in their junior and senior years of study. Methods used are quantitative and the research nature is correlational. Results show that students whose locus of control is more internal are more motivated to volunteer before entering the workforce. Internal locus of control leads to having intrinsically - oriented motivational preferences upon entering the workforce. Finally, results show that measurement of future job candidates' religiousness in the context of job selection yields no predictive value.

Keywords: Motivation to Volunteer, Job Expectations, Locus of Control, Religiousness

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Introduction

Researchers have spent a lot of time trying to shine a light on the phenomenon of volunteering, devising numerous theories and models which all possess one common goal - understanding whether the nature of volunteering revolves around selfish or purely altruistic motives (Coghlan & Fennell, 2009). Some scholars are interested in the utilitarian nature of volunteering, looking at it from the point of behavioral psychology (Meier & Stutzer, 2007; Jackson & Adarlo, 2014). The act of helping others is associated with the concept of positive reinforcement, which means that the outcome produced by helping others (such as verbal praise and status) is rewarding in itself. As a result, chance for the volunteering behavior at hand to be repeated is increased. Other scholars are more interested in the altruistic nature of volunteering, perceiving it as an activity that serves a more noble purpose (Parker, 1997; Kahana et al., 2013). Regardless of this dual perspective, the fact remains that volunteering is an excellent alternative to a paid job as it provides experience, knowledge, and skills that can increase students' employability (Leko-Simic & Peric, 2018). The more detailed take on motivation to volunteer was brought by Clary and Snyder (1998). They enlist six functions (values, understanding, social, career, protective & enhancement) and argue that every one of them provides a certain form of positive feedback to the self.

In this research we will try to explore the connection between students' aforementioned volunteering functions and job expectations they have upon entering the workforce. With jobs paradigm switching from serving merely existential needs to jobs being a medium for self-development and self-actualization - researchers began to investigate what do individuals expect from a workplace. For instance, Swiatek (2000) had discussed students' and employers' expectations from higher education in regards to the way it can enrich them when entering the workforce for the first time. The author points out that young people would like to position themselves in society and most of them think of the university studies as a good pathway to proper job opportunities (Weligamage & Siengthai, 2003). However, students' incentives vary a lot when it comes to their job expectations. Some students are motivated intrinsically - seeking opportunities for personal growth, maintaining work-life balance and having companies' ethical standards aligned with their own (Stansbie, Nash & Jack, 2013). Other students, on the other hand, are motivated extrinsically - seeking opportunities for ladder climbing, acquiring lucrative compensations and getting plenty of benefits (Klein & Weiss, 2011).

Another theoretical framework our research is grounded in delves into cognitive psychology and our perceived self-sufficiency. We take into consideration the concept called locus of control, which describes the extent to which people attribute their personal outcomes to their own agency on one end, as opposed to other peoples' actions and/or randomness on another end. The former dimension characterizes an internal locus of control while the latter characterizes an external locus of control. In other words: "Internal locus of control is defined as the perception that events are contingent on one's own behavior or one's own permanent characteristics, while external control is characterized by the feeling that outcomes are more a result of fate, luck or chance" (Österman et al., 1999). Research shows that internal locus of control leads to more driven and more generally motivated workers, via mediating effect of intrinsic motivation (Yi Li et al., 2015). We will try to prove that same connection

exists between internal locus of control and more driven volunteers as well, with mediating effect of intrinsic motivation stemming from intrinsically oriented job expectations.

Other theoretical framework we will closely link to volunteering functions and job expectations has to do with personal religious believes. The question poses itself: which cultural factors produce this link between motivational forces on one hand, and religiousness and locus of control on the other?

Literature Review

As for the connection between the locus of control (LoC) and volunteering functions, recent research shows that employees with the internal LoC, who were dissatisfied with their jobs, were more likely to volunteer for the reasons of personal growth and skill advancement, thus postulating the connection between the internal LoC and intrinsic job expectations (Lefcourt, 2014; Giles, 1997). Furthermore, research shows that employee's future motivation for self-advancement and personal agency in form of employee involvement - are both predicted by the internal LoC (Allen & Van Norman, 1996). In the context of our research, when exploring the structure of participant's volunteering functions, this finding emphasizes the importance of taking LoC assessment into consideration. However, one recent study suggests that the causal connection between the LoC and volunteering might perhaps be of a mutual nature. Namely, it has been shown that volunteering experience itself can lead to an internal shift in volunteer's LoC (Desai, Dalal & Rawal, 2018) and change attitudes towards work (e.g., Korican Lajtman, Ocak & Oblakovic, 2019). Hence, involving in various forms of volunteering might be beneficial for the work-related motivation of future employees. Thus, we hypothesize that the connection between intrinsic volunteering functions and locus of control will be positive and statistically significant. When the intrinsic portion of future job expectations is controlled for, this connection will become weaker, thus implying the moderating effect of the intrinsic motivation.

As for the connection between religiousness and volunteering, recent research shows that binary variables, such as ones that put people in two boxes: religious & nonreligious, do not help with the prediction of participant's general motivation to volunteer, nor with the prediction of the subtle nuances in participant's volunteering functions. One research has shown that, in order to determine and predict participant's volunteering efforts, we have to assess their very approach towards the notion of religion. This specific study has assessed the participant's approach towards religion alongside the intrinsic-extrinsic spectrum. Intrinsic religiousness implies a deep and personal sense of one's religion, while extrinsic one implies perceiving religiousness as a mean to a certain end – whether it be moral superiority, social praise or individual well-being. It has been shown that the individuals who report higher levels of volunteer activity have scored significantly higher on the intrinsic scale of religiousness (Bernt, 1989). Other researchers also hypothesize the connection between religiousness and motivation to volunteer, manifested in participant's intrinsic outlook towards the volunteering activity itself (Uslaner, 2002). Helping others is regarded as an important value inside the religious communities - more frequent religious service attendance was even associated with higher proclivity

towards volunteering (Haggard et al., 2015). However, intrinsic religiousness is not synonymous to intrinsic motivation per se – former is a biopsychosocial construct, while the latter is more of a spiritual construct. Thus, we hypothesize that the connection between future job expectations (both intrinsic and extrinsic) and overall motivation to volunteer, when controlled for religiousness, will remain unchanged.

Volunteering Functions

We have already mentioned that Clary and Snyder's (1998) VFI model encompasses six volunteering functions. Values function implies an altruistic outlook for the volunteer and thereby introduces positive self-evaluation to self-concept. Career function provides the much-needed notion of being connected inside the business network, which benefits the future career of a volunteer. Understanding function provides the volunteer with a required set of skills which they cannot acquire through formal education in their respective fields. Further on, some volunteers rely on Social function to serve their need for socialization and getting along with their peers. This way they are able to practice their social skills whilst doing something noble, making acquaintances along the way. Moreover, some volunteers even perceive volunteering work as a part of their psychological development, serving an enhancement function. Psychological categories such as self-esteem, self-respect, assertiveness and autonomy can all be improved and worked on through engagement in volunteering activities. Finally, the last function is called Protective function and it provides the volunteers with a safety net that helps them to cope with internal conflicts and compensate them through helping others. For example, to dismantle the feelings of guilt and selfishness and escape them by doing something that will lead to societies' praise (Clary et al., 1998).

Thus, we hypothesize that the connection between overall motivation to volunteer and locus of control will be positive and statistically significant. When the intrinsic portion of future job expectations is controlled for, this connection will become weaker, thus implying the moderating effect of the intrinsic motivation.

Methodology

Our sample counted 130 Croatian and International students, currently enrolled into undergraduate programs at Zagreb School of Economics and Management (ZSEM). Sample was obtained via convenience-sampling method.

The nature of this research was correlational, with a design structure observing four major variables (volunteering functions measured by 18 items, expectations from work measured by 12 items, locus of control measured by 12 items and religious beliefs measured by 8 items) and one set of demographic variables (measured by 4 items). Data was collected via survey method, conducted via both PAP and computer-assisted questionnaire designs.

Reliability analysis shows that locus of control scale produced a moderate Cronbach Alpha score (α =0.62), while expectations from work, volunteering functions and religious beliefs scales yielded an excellent Cronbach Alpha scores (α =0.80, α =0.90, α =0.96, respectively).

Results

The connection between overall motivation to volunteer and locus of control was positive and statistically significant. When the intrinsic portion of future job expectations is controlled for, this connection becomes weaker – which indicates a moderating effect yielded by intrinsic motivation. Statistical significance in case of full correlation is 0.01 (t=0,26, df=129, p <0,01); but in case of partial correlation, it is 0.05 (t=0,18, df=129, p <0,05).

Furthermore, the connection between intrinsic volunteering functions and locus of control was positive and statistically significant (t=0,24, df=129, p <0,01). When the intrinsic portion of future job expectations is controlled for, this connection overall ceases to be statistically significant (t=0,17, df=129, p >0,05).

Finally, the connection between future job expectations (both intrinsic and extrinsic) and overall motivation to volunteer, when controlled for religiousness, has remained positive and unchanged (from p<0,01 to p<0,01).

Discussion

Our results suggest that students whose locus of control is more internal are more motivated to volunteer before entering the workforce. Our results also suggest that, when controlling for the intrinsic portion of their job expectations when entering the workforce, the connection between Overall motivation to volunteer and locus of control becomes slightly weaker – which indicates a moderating effect yielded by intrinsic motivation. In other words, internal locus of control coincides with having intrinsically-oriented motivational preferences upon entering the workforce – that is a valuable piece of information for a company that wants to select the right person for the job.

In terms of volunteering functions, the results show that internal locus of control is positively connected with intrinsic volunteering functions (understanding, values, and enhancement), meaning that students with internal locus of control will choose volunteering opportunities that provide them with a room for personal and professional growth, while volunteering under conditions where the organizational values are aligned with their own. As we have already posed, internal locus of control is something that can be nurtured and attained. Therefore, by its association with internal volunteering functions, building an internal LoC also builds up students' proclivity towards intrinsically oriented volunteering positions, which could impact their professional choices upon entering the job market. Companies that want this intrinsic orientation to overspill into their workplace culture can use this information when selecting for new employees. Bear in mind that this strategic maneuver couldn't be possible without also measuring the LoC variable - this presents us with a strong argument for including the LoC measures into standard test-batteries for job selection. Who wouldn't consider the implementation of LoC measure if they are certain it will help weed out those candidates that are not suited for the position, maybe because of their maladaptive outlook towards task ownership or control hierarchies within the workplace.

Finally, our research shows that the connection between future job expectations (both intrinsic and extrinsic) and overall motivation to volunteer, when controlled for religiousness, has remained positive and unchanged. This finding implies that religiousness does not mediate the connection between future job expectations and overall motivation to volunteer, meaning that measurement of future job candidates' religiousness in the context of job selection yields no predictive value.

Practical Implications

The implications of our research make a reasonable case for the utilization of volunteering programs within academia – by doing that, universities can produce better equipped future job market entrants. Also, institutionalized volunteering within academia can subsequently make an impact on students' locus of control, shifting it towards the internal end of the continuum. As we've already noted, some studies suggest that volunteering activity itself can influence one's affinity towards internal attributions of own actions (Desai, Dalal & Rawal, 2018). This type of diligence and positive mindset is certainly something that every academic institution wants to instill in its' students. Moreover, the fact that institutionalized volunteering leads to an increased motivation among future job market entrants should incentivize the academia to implement mandatory volunteering into curriculums.

Furthermore, a good case has also been made for the utilization of volunteering programs within companies – by getting involved into volunteering programs and by sponsoring them, companies can improve the acquisition process of future interns customizing the environment they want their future employees to train in. The very title of this research poses the question: can volunteering choices reflect job expectations – the answer is yes. Our research has discovered a specific relationship between overall affinity to volunteer and preferred motivational outlook (extrinsic or intrinsic) that future employees could possess upon entering the workforce (reflected in their job expectations). Motivated and competent employees are more efficient and less dangerous for the company in the long run, in terms of unplanned costs (Richards, Skreblin Kirbis & Korican, 2009). To prevent these costs, companies can offer tailored volunteering programs to students and, by doing that - impact the development of preferred motivational outlook (intrinsic or extrinsic) they will want them to possess when performing on entry level jobs. This is a prime example of preselection because the very fact that someone choose one volunteering program over the other (for whatever reason) certainly tells us something about that person. This information may disclose preferences towards receiving intrinsic or extrinsic incentives when looking for a first job, therefore contributing a predictive value to the selection process.

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A Comparative Analysis of Metaphors Constructing Danger and Force Dynamics in Buddhism Discourse

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Abstract

This study aims to compare the metaphors used to conceptualize danger and their force dynamic patterns in the dharma books of two prominent monks, the Venerable P.A. Payutto and Buddhadas Bhikkhu, who represent Normative Buddhism and Intellectual Buddhism, respectively. Three dharma books of each monk were selected for analysis and they were read to determine dangerous concepts. Metaphors that are used to conceptualize concepts that pose a threat or danger to humans physically or mentally were analyzed and compared in terms of conceptualization and force dynamism. This paper discusses three prevalent source domains which have force dynamics: MOVEMENT, FIGHTING and OBJECTS. This paper argues that Buddhadas Bhikkhu's emphasis on mental practice to reach the state of void results in the metaphorical conceptualization of danger as residing in the mind and forcing movement. In contrast, Venerable P.A. Payutto, as an academic monk who is more conventional, conceptualizes danger as external to humans and restrict humans' movement. This paper concludes that integrating frameworks in cognitive linguistics in the analysis of religious discourse can shed further light on intra- and interreligious comparison, offering a more profound understanding of religious belief.

Keywords: Metaphor, Force Dynamics, Danger, Buddhism, Religious Discourse

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1. Introduction

Religion has an influence on various aspects of human life, one of which is the danger inherent in life and how to cope with it. In fact, it has been argued that religion aims to protect humans from harmful behaviour (McCullough and Willoughby, 2009). It is of interest to investigate how religion constructs a discourse of danger. If religions do indeed aim to protect humans from harm, discourse can be a crucial tool to influence their perception of danger, which can potentially steer them away from risky or dangerous behaviour.

This research investigates how metaphors and force dynamics discursively construct the concept of danger in Buddhism discourse. In particular, it seeks to compare metaphors in the discourse of two prominent monks in Thailand, the Venerable P.A. Payutto and Buddhadas Bhikku, who represent Normative Buddhism and Intellectual Buddhism, respectively (Sirikanchana, 2014), and to identify how metaphors and force dynamics are used to conceptualize danger. The research questions addressed in this paper are as follows:

1. What are the similarities and differences between the target domains related to danger in Buddhadas Bhikku's and Venerable P.A. Payutto's discourse?

2. What are the similarities and differences between the source domains of movement, fighting and object and their metaphorical expression in Buddhadas Bhikkhu's and Venerable P.A. Payutto's metaphors conceptualizing concepts that are construed as being dangerous to humans?

3. What are the similarities and differences between the force dynamic patterns of the metaphorical conceptualization of concepts that are construed as being dangerous to humans in Buddhadas Bhikkhu's and Venerable P.A. Payutto's discourse?

2. The Context of Buddhism in Thailand

Buddhism is the national religion of Thailand (Taweesak, 2016: 159) and it has been practised in Thailand for millennia. In fact, it is an important sociocultural institution which plays a major role in Thai culture, politics and society (Sukwandee, 2007). Buddhism is not homogenous due to there being many movements and little has been done to compare the metaphors used in texts of different Buddhism sects or movements. Since Buddhism can be divided into sects and movements, which share similarities but also have differences in terms of ideas and teachings, it is of particular interest to compare how different sects or movements of Buddhism conceptualize DANGER. This study focuses on the traditional mainstream Buddhism and intellectual Buddhism in Thailand.

Traditional mainstream Buddhism is influential in Thailand and one of its prominent proponents is the Venerable P.A. Payutto, a monk and an academic with substantial publications that disseminate Buddhism and Buddha's teaching in Thailand and abroad. He has published several widely acclaimed books and received UNESCO's Education for Peach Award as well (Tonpo, 2013). According to Phiutongngam (2016), the Venerable P.A. Payutto is a national and international philosopher who encourages the application of Buddhism and Buddha's teaching in various areas of life, such as career, education, self- and social development. Taweesak (2016) states that the Venerable P.A. Payutto interprets Buddhism in light of modern knowledge, applying Buddhist principles to individuals and social morality to address political, economic and educational problems.

In Thailand, intellectual Buddhism is a Buddhist movement that distinguishes itself from mainstream Buddhism (Sirikanchana, 2014). This movement was led by Buddhadas Bhikkhu, who initially trained as a traditional Buddhist. According to Jackson (2003), Buddhadas Bhikkhu still studied Buddhism after he was ordained and had a keen interest in many disciplines, such as science, philosophy and so on. He read original scripts and was not satisfied with formal Buddhist education, which contained a supernatural element. With his knowledge of science, philosophy, logic and other disciplines, he engaged in a radical reformist reinterpretation of the Buddha's teaching, deconstructing it at the root. He viewed Buddhist discourse as figurative in nature, and thus Buddha's teaching requires an in-depth interpretation of symbolic meanings, not a literal one. The supernatural element was reinterpreted as different states of the mind. Buddhadas Bhikku's teaching led to a new movement which Sirikanchana termed Intellectual Buddhism. It focuses on enlightenment via deep contemplation to understand the truth about life so that people can emancipate themselves from attachment. In fact, this movement is now widely recognized and practised nationally and internationally.

This paper compares the discourse of Buddhadas Bhikkhu and the Venerable P.A. Payutto because they are influential figures who represent different movements of Buddhism. Hence, their discourse deserves further investigation.

3. Metaphor and Force Dynamics in Religious Discourse

One of the linguistic features characterizing religious discourse is metaphor (cf. Charteris-Black, 2004; Richardson and Nagashima, 2018). Metaphor is thinking and talking about one thing in terms of another. According to Conceptual Metaphor Theory (Lakoff and Johnson, 1980), metaphors are not only a prevalent feature of language but also a crucial cognitive process. Therefore, an analysis of metaphors in discourse can cast light on how religion plays a role in the human conceptualization of danger. Examples of metaphorical expressions in everyday life which shows the conceptualization of life as a journey is shown below:

"He's without direction in life. I'm where I want to be in life. I'm at a crossroads in my life. She'll go places in life. He's never let anyone get in his way. She's gone through a lot in life." (Kovecses, 2010: 3)

In the domain of religion, research has been conducted on metaphors in Christianity (cf. Pihlaja, 2017; Koller, 2017; Charteris-Black, 2004), Islam (cf. Al-ali and Elsharif, 2016), Buddhism (cf. Pattarakup, 2010) and other religions from various perspectives and text types, and metaphors have been found to be a crucial tool to conceptualize religious concepts. Furthermore, research has also compared metaphors across religions. In Buddhism, studies have investigated how metaphors are used in canonical and contemporary texts. Lu & Chiang (2007) focused on metaphors conceptualizing EMPTINESS and its embodiment grounded in Buddhism Heart Sutra, while Marino (2017) studied metaphors in two Sūtras from the Gāndhārī manuscripts. Work done on more recent Buddhist texts has investigated metaphors used for conceptualizing LIFE (Obpat, 2009), Death (Pattarakup, 2010) and DHARMA (Chiengchaovai, 2014) in the dharma books and speeches of prominent monks in Thailand. In these studies, metaphors have been found to be an important tool to explicate complicated and abstract concepts, rendering them more vivid and accessible.

Even though studies have yielded insights into metaphors in Buddhist discourse, a few issues remain under-investigated. First, Buddhism is not homogenous due to there being many movements and little has been done to compare the metaphors used in texts of different Buddhism sects or movements. Since Buddhism can be divided into sects and movements, which share similarities but also have differences in terms of ideas and teachings, it is of particular interest to compare how different sects or movements of Buddhism conceptualize DANGER. Moreover, while dharma concepts such as LIFE and DEATH have been investigated, to the best of my knowledge, no study has compared the metaphors used to conceptualize DANGER in different movements of Buddhism, though Richardson & Nagashima (2018) compared metaphors of danger in Christian sermons and Buddhist dharma talks. Furthermore, few studies incorporate other cognitive linguistics frameworks, which can shed further light on how metaphor use in religious discourse may influence cognition.

Another framework in cognitive linguistics used in this study is force dynamics (Talmy, 2000). As noted by Charteris-Black, (2018), this framework can offer insights into the force exchange between two entities. Danger involves an entity that causes danger (antagonist) and an entity on the receiving end (agonist). There are four patterns of force exchanges:

1) Resistance to a force: agonists can resist the force from the antagonist.

2) Overcoming resistance: The antagonist can overcome the agonist who tries but fails to resist.

3) Force blocking: The agonist tries to move but the antagonist can block the agonist.

4) Blockage removal: The agonist overcome the blockage from the antagonist.

The analysis of the interplay between metaphorical conceptualization and force dynamics can cast light on the conceptualization of danger, its interaction with humans and how different movements of Buddhism discursively construct concepts of danger. Consequently, this study seeks to offer an intra-religion perspective on the metaphors used to conceptualize DANGER in Buddhism discourse and to make a further interpretation based on the force dynamics framework.

4. Methodology

This study analyzes the metaphors in the dharma books of Buddhadas Bhikkhu (henceforth BB) and the Venerable P.A. Payutto (henceforth PP). The selection of these books was based on the Trilakbooks website, which sells dharma books (http://www.trilakbooks.com). This website offers many dharma books and claims to be one of the main websites for dharma book sales. Thus, it arguably has a large readership. The three books by each monk that are the most frequently viewed were selected for analysis because viewing rates suggest great public attention and thus, the most frequently viewed books potentially have higher impact and readership than

others. The titles of the books by each monk are shown in Table 1 (unless the books have an English title, I provide the translation of the book titles myself).

Venerable P.A. Payutto	Buddhadas Bhikkhu		
1. ก้าวไปในบุญ (Walking into Merit)	1. กิเลสปุจฉา ปัญญาเฉลย (Kilesa		
	Questions, Wisdom Answers)		
2.พระไตรปิฎก: สิ่งที่ชาวพุทธต้องรู้ (The Pali	2. ภาษาคน ภาษาธรรม (Human Language,		
Canon: What a True Buddhist Should	Dharma Language)		
Know)			
3. สามไตร (The Three Dharmas)	3. ยาระงับสรรพโรค (Medicines for All		
	Illnesses)		
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Table 1 Dharma books for the analysis

These books were read manually to identify metaphors. The target domains related to danger are established by reading the books manually and identifying all the concepts that might pose danger to humans physically and/or mentally. If any concepts co-occurred with words associated with danger, such as "new" or "duasne", both of which mean danger, they were noted for further analysis. Furthermore, this study also focused on instances where danger is implicitly mentioned along with words associated with physical, mental, spiritual or social danger.

Then, metaphorical expressions used to refer to these concepts were identified. When these concepts are mentioned later in the text, even without mentioning danger, they were also included in the analysis because the danger or threat of such concepts had been established earlier in the texts. Thus, the metaphors used to conceptualize danger were analysed in terms of the source and target domains.

This study employed the metaphor identification process (MIP) created by the Pragglejaz Group (Pragglejaz, 2007) to identify metaphors in dharma books. Each book was read thoroughly so that metaphorical expressions could be identified in context. Metaphorical expressions were then determined based on the procedure established by the Pragglejaz Group as follows.

"1. Read the entire text-discourse to establish a general understanding of the meaning. 2. Determine the lexical units in the text-discourse

3. (a) For each lexical unit in the text, establish its meaning in context, that is, how it applies to an entity, relation, or attribute in the situation evoked by the text (contextual meaning). Take into account what comes before and after the lexical unit.

(b) For each lexical unit, determine if it has a more basic contemporary meaning in other contexts than the one in the given context. For our purposes, basic meanings tend to be —More concrete [what they evoke is easier to imagine, see, hear, feel, smell, and taste];

-Related to bodily action; --More precise (as opposed to vague); --Historically older; Basic meanings are not necessarily the most frequent meanings of the lexical unit.

(c) If the lexical unit has a more basic current–contemporary meaning in other contexts than the given context, decide whether the contextual meaning contrasts with the basic meaning but can be understood in comparison with it.

4. If yes, mark the lexical unit as metaphorical". (Pragglejaz, 2007: 3)

5. Results and discussion

The frequency comparison of metaphorical source domains in P.A. Payutto's and Buddhadas Bhikkhu's discourse is shown in Table 2. The frequency information in Table 2 indicates similarities and differences in the metaphor used in each data set and that metaphors occur more frequently in BB data both in terms of frequency (198 vs. 82) and types (15 vs. 9) of source domains. This is probably because Buddhadas Bhikku tried to deconstruct the Buddha's teaching and expounded on his reinterpretation (Sirikanchana, 2014); thus, metaphor might be heavily used to deconstruct and conceptualize ideas about what was a risk or threat to humans. Furthermore, as noted by, Buddhadas Bhikkhu used a radical reformist approach to reinterpret Buddhism and views Buddhism discourse as metaphorical in nature (Jackson, 2003). It follows that his writing is replete with metaphorical expressions.

	РР		BB	
Target domain	Freq.	Percent	Freq.	Percent
Spiritual problems	39	47.56	151	76.26
The mind	18	21.95	21	10.61
Dharma	0	0	15	7.58
Life	7	8.54	4	2.02
Humans	0	0	4	2.02
Karma	0	0	2	1.01
Hell	0	0	1	0.51
Causes	17	20.73	0	0
Social conflict	1	1.22	0	0
Total	82	100	198	100

Table 2 Frequency information of the target domains

Regarding PP data, the frequency of metaphorical expressions is much lower probably because his teaching is from the established and conventional ideas in traditional Buddhism. Moreover, he also tried to apply it to everyday life and thus, the topic of his teaching is possibly closer to human's everyday life and more concrete. Thus, literal language can be used to clearly explain his teaching. Still, we can observe that OBJECT and WATER are much more frequent but these are mostly conventional metaphorical expressions used in Buddha's teaching.

Regarding the similarity between the two data sets, the source domains with almost the same frequency in both data sets is fighting. The idea of humans having to fight with danger is then prevalent and equally salient in both data sets. There are also 9 source domains present in both data sets: FIGHTING, FIRE, FOOD, ILLNESS, JOURNEY, OBJECT, SPACE, WATER and orientational metaphor. With respect to the differences between the 2 data sets, the source domains which have the highest frequency in BB is ILLNESS. This is a central source domain used to discursively construct the concepts of danger in Buddhadas Bhikkhu's discourse, particularly in the book Medicine for All Illnesses. Sirikanchana (2014) noted that Buddhada Bhikkhu's teaching was intellectually driven, looking at various abstract concepts. The concept of illness can offer a vivid image to readers. Moreover, as Buddhadas Bhikkhu is a monk of the forest tradition, he describes dharma as herbal medicine in the book "Medicine of All Illness," the source domain of illness is consistent with the cure of dharma teaching.

The overall frequency starts to shed light on the differences between the two monks and a closer look at the source domains, their conceptualization and the associated force dynamics patterns unveils more profound differences in the belief of these two monks. The sections that follow elaborate on the three source domains that are the focuses of this paper. Although many other source domains are used to conceptualize danger, due to space limitations, this paper can only address the source domains of MOVEMENT, FIGHTING, and OBJECTS. This is because these three source domains frequently occur in both data sets, as shown in Table 2, and they all have dynamic force patterns while the rest do not. In what follows, each source domain is discussed in terms of aspects that are mapped onto the target, metaphorical expressions and conceptual metaphors identified, as well as dynamic force patterns. A selected excerpt where metaphorical expressions are identified includes an English translation provided by the authors. It should be noted that the authors try to keep the translation as close to the source language as possible, even though the more sophisticated language might be more appropriate to the religious register. This is because the purpose of the translation is to facilitate the international audience's understanding of arguments in this paper. However, it is important to note that the analysis is based on the Thai language, not the translation.

5.1 Movement

The metaphorical expressions and force dynamic patterns associated with the MOVEMENT source domain discursively construct danger inherent in the path towards achieving religious goals, conceptualized as the destination. The movement source domain occurs in both data sets but they instantiate different conceptualizations. That is, while Buddhadas Bhikkhu construes journey, which does not require travelling to reach a destination, Venerable P.A. Payutto construes a problematic journey where there is no movement. These patterns are consistent with the dharma teaching of each monk; that is, while Buddhadas Bhikku advocates mental and spiritual practice to see all things as nothingness, Venerable P.A. Payutto focuses on applying dharma teaching in everyday life. This observation can be made based on the following excerpts:

An excerpt from Venerable P.A. Payutto data

(2) ถ้าเราเข้าใจแล้วยกธรรมขึ้นมานับถือให้จริง ใจของเราก็จะพ้นจากตัวตนขึ้นไปเหนือการยึดติดถือมั่นในอัตตา มารวมกันที่ธรรม เป็นอันหนึ่งอันเดียวกัน ก็จะเกิดความสามัคคีได้จริง เมื่อใจขึ้นไปถึงธรรม เป็นอิสระ ไม่ถูกความยึดติดถือมั่นในอัตตามา<u>จำกัดปิดกั้น</u> ปัญญาก็จะมองเห็นชัดแจ้ง ตรงตามที่เป็นจริง แล้วก็แก้ปัญหาทั้งหลายให้สำเร็จได้(The Three Dharmas, p.11)

Once we understand and wholeheartedly embrace dharma, our minds will rise above the 'self' and the attachment to our egos. All our minds will coalesce in dharma, becoming one, creating true harmony. Once the mind reaches dharma, it will be free. It will not be <u>obstructed</u> by egoistic attachment.

Dharma is conceptualized as an upward journey. There are obstacles of various kinds such as mental defilements, which can endanger the journey. These can be seen from the words จำกัดปิดกัน (obstruct) in the excerpt. The force blocking pattern was identified. The agonist is the mind, which has a natural tendency to move towards dharma. Yet, Kilesa and egoism are antagonists exerting forces on the mind, preventing it from moving towards the destination

An excerpt from Buddhadas Bhikkhu data

An excerpt from Buddhadas Bhikkhu data

<u>หยุด</u>อย่างภาษาพระพุทธเจ้านั้นวิ่งอยู่ก็เรียกว่า<u>หยุด</u> มัน<u>หยุด</u>ความต้องการของกิเลสตัณหาโดยประการทั้งปวง ไม่มีตัวฉันที่จะต้องการอะไรที่ไหน ไม่<u>วิ่ง</u>ไป<u>วิ่ง</u>มาที่ไหน (Human Language, Dharma Language, P. 29)

Regarding the word '<u>stop</u>' in the Lord Buddha's language, even though you are running, you still <u>stop</u>, meaning you <u>stop</u> all the desires caused by Kilesa and lust. There is no 'I' who wants anything or <u>runs</u> anywhere.

Buddhadas Bhikkhu discusses a path of dharma towards one's destination, i.e., nirvana. It is a path on which the further one walks, the further away from the destination one will go. To reach the destination requires not walking. Dharma is a path towards non-movement. In terms of force dynamics, danger is conceptualized in terms of overcoming resistance, where humans are supposed to stay still and stop but are swayed by worldly affairs, putting themselves in danger.

5.2 Fighting

The source domain of fighting is used to conceptualize the interaction between humans and dangers as opponents fighting each other. While Venerable P.A. Payutto used metaphor to conceptualize unspecified dangers external to humans, Buddhadas Bhikkhu used metaphor to conceptualize dangers, which often refer to emotions, as inherent in the mind. This is probably due to Buddhadas Bhikkhu's reinterpretation of Buddhism and his emphasis on mental and spiritual practice to achieve the state of void.

An excerpt from Venerable P.A. Payutto data

พระพุทธศาสนาตามพระพุทธพจน์ในพระไตรปิฏกบาลีมีลักษณะพิเศษที่สอนระบบจริยธรรมแห่ งการพัฒนาตัวของมนุษย์เองให้<u>หลุดพ้น</u>จากปัญหาทั้งหลาย สู่ความเป็นอิสระที่แท้จริง โดยไม่ต้องไปขึ้นต่อ<u>อำนาจบงการ</u>จากภายนอก (What a True Buddhist Should Know about the Pali Canon, p.31)

According to the Lord Buddha's words in the Pali Tripitaka, Buddhism has a special characteristic in that it teaches humans the ethics of self-development so that they can <u>emancipate</u> themselves from all problems, have true freedom and <u>free</u> themselves from external controlling forces.

From the excerpt above, external forces or causal factors are conceptualized as holding humans in captivity, and thus they need to be eliminated or humans need to free themselves from them. The mind is construed as moving and being hindered by antagonists. That is, the force block pattern is used to conceptualize the interaction between humans and dangers.

An excerpt from Buddhadas Bhikku data

คำว่า<u>ศัตร</u>ู ในภาษาธรรมะนั้นหมายถึงจิตใจของตัวเองที่ตนตั้งไว้ผิดๆ จิตใจของตัวเอง และตนเองนั่นแลที่ตั้งมันไว้ผิดๆ นั่นแหละคือ<u>ศัตร</u>ู ไม่ใช่คนนอกตัวเรา (Human Language, Dharma Language, P. 40)

The word '<u>enemy</u>' in the dharma language refers to the human mind, which has been put in the wrong place. Your mind and your 'self,' which have been misplaced, are <u>enemies</u>, not somebody external to us.

From the excerpts, something risky or dangerous is conceptualized as an enemy, as shown in the word "AGŞ" (enemy). The mind creates 'self' and emotions, which then destroy itself. This suggests the conceptual metaphor emotion is the enemy. In terms of force dynamics, data from Buddhadas Bhikkhu construes humans and the mind as standing still but being forced towards movement or the overcoming resistance pattern.

5.3 Objects

This metaphor makes use of various aspects of objects to conceptualize abstract concepts that could pose a risk, mainly to the human mind and spirituality. This source domain concretizes dangers which are often abstract or related to emotion and the mind.

An excerpt from Venerable P.A. Payutto data

ความรู้สึกที่เกี่ยวกับตัวตน ที่จะ<u>ยึดติด</u>ในตัวตน ที่จะให้ความรู้สึกว่ายอมกันไม่ได้ (The Three Dharmas, p.11)

Your feelings and <u>attachment</u> to the 'self' result in the feeling that you cannot give in to others.

The feeling of 'self' is conceptualized as an object that can be attached, as shown in the word " $\vec{u} \cap \vec{\Omega} \cap$ " (attach) It portrays a sense of restriction. Emotion and self-attachment restrict the mind, preventing humans from giving in to others. Therefore, this shows the pattern of force blocking.

An excerpt from Buddhadas Bhikkhu data

23) จิตใจที่เรา<u>ตั้ง</u>ไว้ผิดๆนั่นแหละคือศัตรู (Human Language, Dharma Language, p.40) A mind which we <u>put</u> in the wrong place is the enemy.

In Buddhadas Bhikkhu's books, humans are at risk when their minds are put in the wrong place.

Putting one's mind in the wrong place refers to thinking about and focusing on the wrong things, which may lead us astray. The mind is the agonist, whereas humans themselves are the agonists in the excerpt. The mind has a natural tendency to stay still but since humans, antagonists, move it to the wrong place, it becomes our enemy. Thus, in terms of force dynamics, the interaction between danger and humans is metaphorically conceptualized as overcoming resistance.

6. Conclusions

This paper compares metaphors used to conceptualize danger and force dynamic patterns in dharma books written by the Venerable P.A. Payutto, representing Normative Buddhism, and Buddhadas Bhikkhu, representing Intellectual Buddhism. The source domains that are the focus of this article are MOVEMENT, FIGHTING and OBJECT. Unlike other studies that investigate metaphorical expressions used in dharma books by various authors without comparison across authors, this study compares how different authors use metaphorical expressions to conceptualize concepts that can pose a danger to humans' life. It was found that the concept of danger is abstract and, in Buddhism, metaphors play a crucial role in providing an understanding of danger in humans' life.

Disparities between the two monks are due to their different beliefs. Buddhadas Bhikkhu emphasized the notion of dying before death and nothingness; that is, he encouraged people to conceptualize themselves as nothingness, like they already died and thus do not exist. That way, people will not be affected by the sense of self, which is the source of suffering. This belief is reflected in the way metaphor often conceptualizes danger as resulting from movement and danger is frequently construed as forcing humans or their minds to move. The Venerable P.A. Payutto, on the other hand, follows the traditional teaching of Buddhism. The Buddha's teaching is a didactic discourse which is full of action. His metaphors conceptualize danger as dynamic entities moving to exert force on humans or restricting movement.

This study furthers our understanding of how danger is discursively constructed in Buddhist religious discourse. Within Buddhism, there are different movements and different ideas. Framework in cognitive linguistics, especially metaphor and force dynamic, can yield insights into the conceptualization of religious concepts, which are deeper than investigating ideas through content analysis alone. Therefore, this study also has implications for comparative religion studies, offering a way to compare the beliefs of different religions using cognitive linguistics frameworks.

This study is a small scale focusing on a small number of dharma books of two prominent monks. Given that these monks have written hundreds of dharma books, other studies can compile a corpus of these books and make a comparison, using corpus linguistic methodology. Apart from the concepts that pose a threat to human life, other concepts can also be investigated, such as globalization or capitalism, which have also been written by these two others and other monks as well.

The cognitive linguistics frameworks offer a window into the mind and cognitive makeup of believers of different religions or even different sects of religion. Indeed, they offer a subtler understanding of how religious discourse may influence our conceptualization and understanding of the world, and how we should live our lives. In so doing, it can enhance inter- and intra-religious communication, promoting mutual understanding of the different standpoints. This can hopefully lead to peaceful coexistence among believers of diverse religions.

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The Implementation of VR Technology in the Recoloring of the Historical Pharoanic Sites (Case Study On Khuwy's Tomb)

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Abstract

Egypt has a rich pharoanic heritage. Most of them are tombs or temples as the Egyptians believed in eternity in afterlife. The ancient Egyptian artist decorated tombs and temples with colored hieroglyphic texts and illustrations that serve their eternity believes. By developing his own color identity a remarkable color scheme was distinguishing most of the pharoanic arts. The ancient Egyptian artist used pigments made from inorganic substances for coloring, which explains the extraordinary good preservation of most of the colors on tomb walls. But these inorganic pigments are affected by degradation factors through the years so the colors that appears now to the viewer are different than the original colors, in addition to the deterioration of some parts of the historical illustrations in most tombs and temples. Therefore studies of the chemical compositions of pigments used in each Egyptian dynasty and their effect on the degradation of colors is important to analyze the original colors used and understand the color scheme chosen by the Egyptian artist in his illustrations. This research will examine the impact of using the modern technology of VR - virtual reality - that replaces the real word with a virtual one, in representing the ancient pharoanic sites in a complete assumption of their original colors before degradation. Based on the recent researches regarding chemical degradation of Egyptian colors. The study will provide an interesting experience for the visitors leading to attraction of large numbers of tourists to Egypt. A historic pharoanic site is used as a case study for the research (Khuwy's tomb in Saqqara- discovered in April 2019).

Keywords: Virtual Reality, Khuwy's Tomb, Pharoanic Heritage, Color Degradation

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Introduction

During the COVID-19 lockdown, Egyptian authorities launched virtual trips of some of the historic Egyptian sites. The project was applied through 3D modeling by Harvard University offering free virtual entry to historical places. This project had a great impact in promoting the Egyptian historical areas, and encouraging tourists to visit Egypt after the lockdown ends. The Egyptian virtual trips included some of the most important tombs in ancient Egypt as the 5000 years old tomb of Queen Meresankh III. (Stewart, J. 15-4-2020)

This research will study a new approach of the Egyptian virtual trips using the existing theoretical researches on AR and VR technology in providing recolored historical arts to the viewer, providing two images of the tombs, a virtual 3d image of the tomb in it's meanwhile condition, and an interactive option where the user can experience the same tomb in it's full colors and a perfect restored condition resembling how it looked like thousands of years ago. Which is expected to increase the touristic potentialities, leading to more economical recovery demanded after the Egyptian economical crisis that followed the country's revolution in 2011.

Introducing VR and AR in Saqqara

VR and AR technologies have a strong impact in the 21st century, as the viewer feels it's a real environment. The VR is capable of representing a complete 3d image of the historical place, while the AR integrates this image with information about it in different ways to the visitor. "The interaction with special devices creates an isolation field to the user, allowing him to enter an immaterial digital space, and to experience it through a spherical projection around him through these devices" (Gauzzaroni, G. Pillai, A.S. 2020. p.89). The spherical projection is the recreation of original colors, images and illustrations in the tombs of Saqqarra, allowing the user to experience a new prehistorical visit to the tomb.

Khuwy's tomb in Saqqara as a case study

Khuwy's tomb - the case study for the research - chosen by the American archeology magazine as one of the 2019's top 10 discoveries, and was announced by authorities on the 13th of April 2019 in a press conference. The tomb was created for a man named Khuwy, a dignitary from the Fifth Egyptian Dynasty that dates from 2494 B.C to 2345 B.C, it represents the Dynasties III, IV and VI under the title of the Old Kingdom (Hawass, Z. 2002), as announced by authorities; the discovery of this tomb was during the documentation of the collection of pyramids that belong to King Djedkarea, who was the eighth ruler of the Fifth Egyptian Dynasty that ruled Egypt for 32 years (Essam, A. 13-4-2019). The artistic scenes on the walls of the tomb is covered with remains of most of the colors, providing a perfect case study for color restoration and degradation factors to provide a 3d virtual recolored interactive visit to the user.



Figure 1: Khuwy's tomb in Saqqara- discovered in April 2019, case study for the research. The tomb consists of three decorated walls, the front wall contains a clear illustration of the tomb's owner sitting infront of horizontal registers containing offerings. Photo adapted from Megahed, M & Vymazalová, H. 2019. Republished with permission.

Art in the fifth dynasty followed the same rules in the fourth dynasty in a more developed concept. According to Pflüger, K., & Ethel W. Burney (1937) "Art In the fifth Dynasty took a remarkable and completely unexpected course, as it became elegant, imaginative, and bright, instead of remaining stiff due to the changed political situation within Egypt" (p. 7)



Figure 2: Two scenes from the right and left walls of the tomb. The right wall of the tomb is divided into vertical columns, while the left wall is divided into horizontal registers containing illustrations. The three walls of the tomb show clear color remains that support the study. Photo adapted from (Megahed, M & Vymazalová, H. 2019). Republished with permission.

The study of color degradation in Khuwy's tomb

According to Gimeńez, J. (2015), "Most pigments used by the Ancient Egyptians were obtained from minerals relatively ubiquitous in the Egyptian landscape; the colors obtained are usually called "earth colors" and are generally characterized by a high stability against weathering and, consequently, the color remains unaltered for centuries or millennia " (p.1).

This explains the preservation of most of the colors on the walls of Khuwy's tomb. But these minerals are exposed to degradation factors as chemical reactions occur between the pigments and different weather conditions resulting in new visible colors (Robins, G. 2008). This study will examine the results of the original colors assumption based on Egyptology researches regarding the Egyptian art in the old kingdom, and the chemistry of the degradation process through chemical engineering, in order to produce a digital virtual recreation of the original colors.

Egyptian blue was a very unique color in ancient Egypt. Ancient Egyptians synthesized a blue pigment that is considered the earliest artificial pigment. The Blue pigment was obtained from azurite (copper carbonate), the blue color is due to the presence of crystals of the mineral Cuprorivaite (CaCuSi⁴O¹⁰), when interacts with different minerals causes copper chloride disease which results in the transformation of the blue color to a greenish color -a different form of copper carbonate - (Gimeńez, J. 2015).

White pigment in the fifth dynasty was usually obtained from calcium carbonate, remains of the white color still appears in different illustrations in the tomb, but it loses it's pure intensity through the years and turns to tints of light grey mixed with slight remains of the clear white calcium carbonate. Black pigment was obtained from charcoal, which also loses its saturation and intensity through time. The different hues of Yellow pigment were obtained from iron oxide, while the bright yellow was obtained from orpiment. The yellow color was a remarkable color in ancient Egypt representing gold particularly in royal tombs, but orpiment fades overtime and turns to dull shades of yellow (Robins, G. 2008). Red pigment was obtained from Realgar. Red realgar is transformed to different shades of yellow or orange depending on the interaction with oxygen where Pararealgar is created. Green pigment was a result of chemical synthesis composed of crystals of Wollastonite (CaSiO³), which turns to dark shades of dull green (Gimeńez, J. 2015).

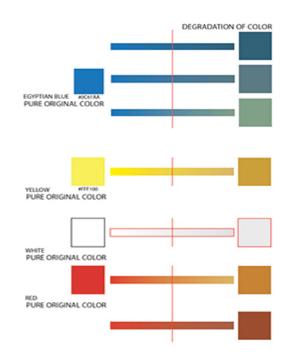


Figure 3: The degradation of colors in Khuwy's tomb; Blue (azurite) changes to malachite (green in color). Yellow (orpiment) changes to dull shades of yellow. Red (realgar) changes to yellow or orange (pararealgar). White (calcium carbonate) changes to a light tint of grey.

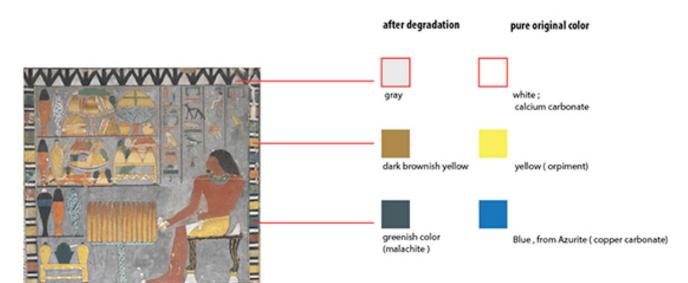


Figure 4: The front wall of Khuwy's tomb in its meanwhile condition, showing an example of the extracted colors versus their original assumption. Photo adapted from (Megahed, M. Vymazalová, H. 2019). Republished with permission.

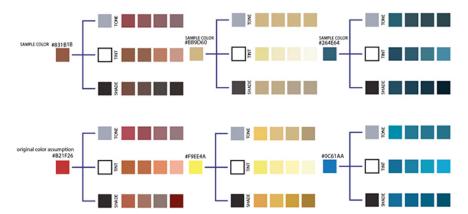


Figure 5: The Tones, tints and shades of the extracted colors in Khuwy's tomb after degradation are studied and analyzed. Also Tones, tints and shades from the original assumption of colors based on the study of color degradation in this research is generated in order to be used in the virtual recolored images of Khuwy's tomb.

Digital restoration of Khuwy's tomb.

Digital restoration of historical sites has attracted more and more attention, it is considered a very important and economical method in the historical sites preservation, as low-cost hardware can be easily functioning to produce the virtual restored structure of the historical site. Image-based restoration is very easy to apply with only few images from the original site to reproduce the 3d virtual structure (Hou, D. Shen, X. Li, X. Liu, Y. & Wang, Y. 2006).

The digital restoration of Khuwy's tomb starts with the image collection, where multiple consequence clear images of the walls are collected, followed by the optimization processing to build the 3d virtual image of the tomb in it's meanwhile condition. The second stage of the project is to recreate any damaged areas in the tomb's illustrations. The process includes the integration with digital reassembly using adobe Photoshop software where damaged areas has been accurately recreated as in figure 6. The third stage is the recoloring assumption of the tomb's illustrations, where the tomb is recolored digitally to recreate the original image of the tomb before degradation. The recoloring process has been applied using both Adobe Photoshop software and Adobe Illustrator. The recoloring process follows the research's study of color degradation. All the green shades in the tomb's illustrations are recolored blue, where Blue (Azurite) has changed to Malachite (green in color). All the dull shades of yellow are recolored to pure vibrant yellow, as Yellow (orpiment) has changed to dull shades of yellow. The orange shades are recolored pure vibrant Red, as red (Realgar) has changed to yellow or orange (Pararealgar). Any remains of white indicates the presence of calcium carbonate that was used to produce the white color, so they are recolored to clear pure white, also light tints of grey is recolored to white. The black remains that lost its intensity is recolored to pure saturated black color (Gimeńez, J 2015).

The Egyptian artist used burning devices to light up tombs during his painting process, Egyptology researches assumes that the ancient Egyptian artist used animal fats as fuels for burning. The light emitted from animal burning fat is a warm light, causing the pigments to look visibly warmer to the artist, therefore the recoloring

simulation of the tomb recommends the colors to be red shifted to reflect the original visible condition (Strong, M. 2018).

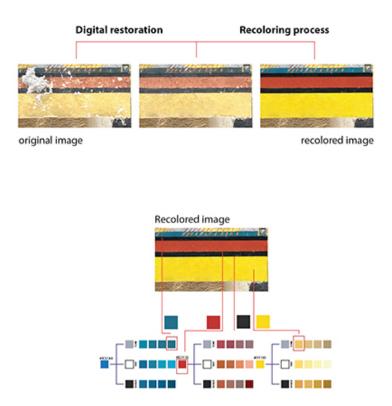


Figure 6: An enlarged portion of the illustration is chosen to explain the process. The damaged area in the original image is the recreated using adobe Photoshop software followed by the digital recoloring .



Figure 7: An example of the recoloring process of the original illustration on the front wall of Khuwy's tomb using the color degradation study in this research to retrieve an original image of the front wall.

Processing of the virtual recolored tomb

The virtual content of both the recolored and the real image of the tomb are presented to the user through special devices with high-resolution image quality available at the touristic site and can be accessed online. The user enters a virtual 360° circular view of the tomb when he wears his headset (Gauzzaroni, G. Pillai, A.S. 2020). The user

interface design is processed to support the user's virtual experience and make it more valuable to the viewer by providing multiple Interactive information options. First the user can hear general information regarding the tomb's historic value, the tomb's owner and the history of the fifth dynasty. The viewer can explore specific information regarding each color, color identity, color symbolism and color inspiration for the ancient Egyptian artist in the fifth dynasty. He can then explore explanatory information provided regarding the virtual recoloring process, the color sources, the degradation pattern of Khuwy's tomb, and how the 3d recolored virtual assumption has been produced. He can compare the steps of color transformation through an infographic analysis provided in the integrated virtual visit.

The virtual experience of recoloring the tomb offers interactive scrollbars, designed horizontally to be easily functioning during the viewer's virtual trip. These horizontal scrollbars offer the viewer interactive options to change each color manually to see how it transformed in thousands of years, giving him an enriched experience of viewing the tomb.







Figure 8: The user enters a virtual 360° circular view of the tomb when he wears his headset.

He can also navigate this virtual view, and explore the original colors through interactive scrollbars, where he can experience changing each color manually between its original pigment and the visible color after degradation. The interaction with the VR and AR information depends on personal skills and experience of the user on how to interact with the user interface.

The interactive scrollbars are divided into five colors positioned on the left side of the bars; these colors are black, white, red, yellow and blue, representing the original colors of the tomb before degradation. Each color can be changed manually to its visible color in the real tomb after degradation - placed on the right side of the scrollbar- and vice versa. The high-saturated black color scrollbar offers changing the color to a dark shade of grey. The white color can be changed to a light tint of grey. The red color can be changed through the scrollbar to two different dull shades of

orange-yellow extracted from the tomb. The saturated yellow color can be changed through the scrollbar to a dull shade of yellow, and the blue color can be changed through the scrollbar to three different shades of green color extracted from the tomb (Figure 9).

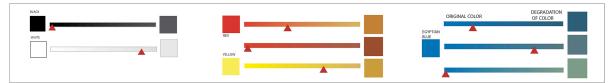


Figure 9: The interactive scrollbars are designed to be easily functioning during the viewer's virtual trip, giving him an enriched experience, where he can change each color manually to see how it transformed in thousands of years.



Figure 10: Designing an integrated UID that supports the user's virtual experience of the tomb with organized screen flows (Kim, U. Wang, Y & Yuan, W. 2020), that allows the user to navigate interactive information, videos, and infographs that provides information regarding each color, the color identity, color symbolism and color inspiration for the ancient Egyptian artist.

Conclusion

This paper studied the impact of the integration of VR and AR technologies in restoring and recoloring Khuwy's tomb. It offered a new touristic virtual visit to the user, allowing him to view the tomb in it's original restored colored condition, with interactive UI design to change each color manually between it's original pigment and the visible color after degradation resulting in an enriched experience to the visitor. The study is expected to increase the Egyptian touristic potentialities leading to more economical recovery in Egypt by promoting the historical places in Egypt in a new virtual restored condition. The interactive experience is also applicable to Egyptian tombs that are not open the public due to preservation issues.

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World Order, Regime and Law of the U.S., UK, France and Europe

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The European Conference on Arts and Humanities 2020 Official Conference Proceedings

Abstract

After the Second World War, the United States, United Kingdom, France and Europe have built Peace, World Order, Regime and Law with NATO and alliances. In 2020, the World is confused by the coronavirus pandemic. The United States, United Kingdom, France and EU cope with the pandemic. On March 2020, French President Emmanuel Macron said "We are at war." Prime Minister Giuseppe Conte decided on lockdown of Italy. On April 2020, the U.S. President Donald Trump criticized the WHO (the World Health Organization) for the coronavirus pandemic response. After the First World War and the Second World War, the United States, United Kingdom and France have built World Order, for example the United Nations. Certainly, the pandemic may seriously influence the modern politics and world. But I think that the World Order of the U.S., UK, France and Europe will continue and build peace, regime and law. The clash of civilizations and remaking of the world order advocated by Samuel Phillips Huntington may occur, but the U.S., UK, France and Europe will build Peace and World Order after the coronavirus pandemic. This paper researches the World Order of the U.S., UK, France and Europe after the Second World War. And this paper investigates how the U.S., UK, France and Europe will survive and revive after the pandemic.

Keywords: Regime, Power-Dependence, Interdependence, Linkage

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Power-Dependence of Intergovernmental Relations and Interdependence of International Relations

First, actors of the power-dependence are organizations composed of the central government and local governments within the same regime of the state but different evaluation systems, while actors of the interdependence are states some of which belong to one regime but the other of which belong to different regime. The legislative rule in the power-dependence relations is the statute and common law, while the legislative rules in the interdependence relations are the international law including treaty and soft law, especially manipulating on the balance of power and collective security. Second, common factors between the power-dependence theory and the interdependence theory are linkage, asymmetry and cost of change. Concept of the linkage is essential both in the power-dependence in the intergovernmental relations and the interdependence in the international relations. The power-dependence itself is the concept of linkage between the central government and community of the local authorities. In the framework of the power-dependence in the UK there exist four kinds of linkages.

The linkage plays an important role in the international interdependence theory. Nye pointed out that much of the political conflict over interdependence involves the creation or prevention of linkage, and economic sanctions are often an example of such linkage (Nye, 2007, pp.216-7). Asymmetry is also common factor in the powerdependence and the international interdependence. Asymmetry is a concept of unbalanced power between two organizations or states. Rhodes recognizes asymmetry in the intergovernmental relations (Rhodes, The National World of Local Government, p. 20). Nye pointed out that asymmetry is at the heart of the politics of international interdependence. He analyzed its reason that if two parties are interdependent but one is less dependent than the other, the less dependent party has a source of power as long as both value the interdependent relationship, and concluded that manipulating the asymmetries of interdependence can be a source of power in international politics (Nye, 2007, p.215). Cost of change is also common factor in the power-dependence and the international independence. Rhodes pointed out that unilateral action is not cost-free; as the cost becomes visible, the government either intensifies the attempt to direct local authorities or employs different strategies by recognizing its dependence on local authorities (Rhodes, 1986a, p.6). The cost of international interdependence corresponds to sensitivity and vulnerability, respectively. Due to Nye's definition, sensitivity means amount and pace of the effects of dependence: scale and quickness which change in one part influences to another part. Vulnerability means the relative costs of changing the structure of a system of interdependence (Nye, 2007, pp. 213-4). Difference between power-dependence and interdependence exists in sanction. Within the intergovernmental relations in the UK, the discretionary power of the local authority is conferred by the Parliament. Although the local authority can implement policies using conferred discretion, the local authority must comply under the principle of *ultra vires*. Therefore, the sanction does exist even if the local authority acts beyond the statute. In the interdependence relations, the bilateral treaty or multilateral treaty and many trade agreements or environment protocols never provide sanction based on the legal force. However, if the compliance is not maintained, stronger state sometimes maneuvers political sanction or economic sanction. For maintaining peace and stability, the balance of power and collective security sometimes require the political sanction. The states seek alliance, the balance of

power and the collective security.

I also discuss degree of dependence in the power-dependence of the intergovernmental relations and interdependence of the international relations. The political agenda in the intergovernmental relations is featured by the bargaining between the state strategy and the local interest. The political agenda in the international relations depends on the regime of states. As pointed out by Krasner, the regime is defined as a set of principles, norms, rules and decision-making procedures around which expectations of actors converge in the given area of international relations (Krasner, 1982, pp. 185-7). The interdependence relations also exist between different regimes by considering balance of power.

(Yoshihiro Nagata, Power-Dependence of British Central-Local Government Relations and Interdependence of International Relations in the EU, ACPEL2016)

Theory					
	Power-Dependence Theory	Interdependence Theory			
representative Researchers	R.A.W. Rhodes	Joseph Nye Robert Keohane			
Research Area	Administration Politics	International Relations			
Objective	IntergovernmentalRelationsbetween Centre and Local	International Relations among States			
Common Concept 1	Linkage between Centre and Local Connection between Organizations, Policy Networks	Linkage between States			
Common Concept 2	Asymmetry between Centre and Local	Asymmetry between States			
Common Concept 3	Cost Unilateral decision is not cost- free.	Cost Short-term sensitivity Long-term vulnerability			
Law	Law, Statute	Treaty, Soft Law			
Sanction	Law with sanction	Treaty and Soft Law without sanction			
Stability	Principle of Ultra Vires	Collective Security and Balance of Power Alliance			

 Table 1 Comparison between Power-Dependence Theory and Interdependence

 Theory

This Table is made by the author based on Rhodes(1986a, 2006), Nye(2007), and Keohane and Nye(1977).

(Yoshihiro Nagata, Power-Dependence of British Central-Local Government Relations and Interdependence of International Relations in the EU, ACPEL2016)

Policy Networks and Linkage

The policy networks and the linkages have similarity, meanwhile the former is addressed in the domestic power dependence and the latter in the international interdependence. Policy networks are composed of bureaucracy, central government, party, parliament, politicians, interest groups and local government. Policy networks, especially central government and bureaucracy coordinate domestic and foreign issue and policy. Policy-making has been determined by policy networks. Rhodes defines policy networks as set of formal institutional and informal linkages between government and other actors structured around shared if endlessly negotiated beliefs and interests in public policy making and implementation (Rhodes, 2006, pp. 423-424). Rhodes continues that the power-dependence approach treats policy networks as set of resource-dependent organizations. Their relationships are characterized by power-dependence (Rhodes, 2006, pp. 432-433). On the other hand, in the world of international relations, Kissinger, a pioneer of the 'linkage', describes start of the linkage in the Nixon Administration. Kissinger pointed out that Nixon's view of Soviet Union was not based on all-or-nothing proposition as his predecessors but rather based on comprehensive approach, that is, linkage on issues with varying degree of solubility. Nixon attempted to synthesize all the elements of the superpower relationship into an overall approach which is neither confrontation nor conciliation (Kissinger, 1994, p. 714). Keohane and Nye pointed out that military and economically strong states will dominate organizations and issues by linking their own policies to other states' policies, however, when military force is devalued, strong states may still attempt linkages on other issues, trade, shipping or oil (Keohane and Nye, 1977, pp. 30-31).

The power-dependence theory (Rhodes, 1986b) and interdependence theory (Keohane and Nye, 1977) involve the policy networks and the linkage, respectively.

(Yoshihiro Nagata, Policy Networks of Central-Local Government Relations in the UK and Japan and Linkage of International Relations in the EU, IICSSHawaii2017)

Linkage Diplomacy

James Rosenau created "linkage" theory connecting with domestic politics and foreign policy in 1960s (Rosenau 1969). Linkage theory means how domestic politic affects foreign policy. Afterwards, in 1970s, the concept of "linkage" has been reconstructed by Henry Kissinger. The concept of linkage by Kissinger is the revolutionary idea such that when state conducts diplomacy and foreign policy, the states should not carry out diplomatic negotiations at odds with one of issues, but carry out diplomatic negotiations in the package of several issues. By using the concept of linkage, Kissinger challenged negotiations between the United States and the Soviet Union. When Kissinger reconstructed the concept of linkage, the linkage strategies were used as the concept to alleviate the conflict relations between the United States and the Soviet Union (Kissinger 1979, 1994). After that, in 1980s, the concept of linkage has been used as the relationships between the allies and the friendly nations, for example, the relations between the U.S. and Japan, the relations between the U.S. and the UK, the relations between the U.S. and the EU, and the relations between the U.S. and Canada. Joseph Nye Jr. have defined linkage strategies in association with trade and security between the United States and Japan (Nye 2007). So, Japan has been guaranteed security and peace by the United States through the U.S.-Japan Security Treaty, the Treaty of Mutual Cooperation and Security between Japan and the United States of America. Nye defines that Japan has to accept asymmetry, imbalance of trade instead of benefits of national security. This is the matters of sensitivity and vulnerability. This is essential for the cost of interdependence. Keohane and Nye referred these matters to "interdependence" or "complex interdependence." The concept of interdependence by Nye and Keohane has been based on the liberalism and constructivism, in a sense, as antithesis of realism, traditional diplomatic idea. The concept of interdependence is crucial in modern domestic politics and diplomacy (Keohane and Nye 1977).

The policy-making actors in domestic politics are bureaucracy, party and parliament. This paper will discuss how bureaucracy affects foreign policy. This paper studies bureaucracy by the two reasons; first, as Rhodes pointed out, all the services in the domestic policy network are a mixture of bureaucracy, market and network, especially, bureaucracy is the most influential actor in policy-making, second, what bridges between domestic politics and foreign policy are government and bureaucracy (Rhodes 2006).

There exists a preoccupation that domestic politics and foreign policy are absolutely different matters. Kenneth Waltz regarded the cause of wars as one of three images: within individuals; within the structure of individual states; or within the structure of the interstate system. The third Image depends on the sovereign state by rational and unitary actor (Cohen 2008, p.120, Waltz 1959). The relationship between domestic politics and foreign policy is not found in Waltz's concept in 1959. Later, however, Waltz pointed out importance of domestic determinants of state action, such as leadership and bureaucracy (Waltz 1979), (Katzenstein, Keohane and Krasner 2004, p. 653). On the other hand, from the end of the 1970s, new political theory emerged that the domestic politics is deemed to relate with the foreign policy. Representative scholars of this new political theory are Katzenstein and Putnam. The connection between domestic politics and foreign policy come to be captured in the international political economy, whose issues are free trade on car, agricultural product and oil because of tariff reduction.

In 1978, Peter Katzenstein presented a theory that domestic policy influences the foreign policy. In the preface of Katzenstein's literature, "it was to understand how "domestic structures" shape political strategies in the international political economy" (Katzenstein 1978, p. vii). Katzenstein described "The action in society influencing the definition of foreign economic policy objectives consist of the major interest groups and political action groups. The former represents the relations of production (including industry, finance, commerce, labor, and agriculture); the latter derive from the structure of political authority (primarily the state bureaucracy and political parties)" (Katzenstein 1978, p. 19). In contrast to the statist regarding states as actors, the domestic structure privileged state-society relationship in Katzenstein's theory (Katzenstein, Keohane and Krasner 2004, p.667). Robert Putnam also insisted that domestic sphere and foreign sphere are interwoven more than previously assumed (Putnam 1988). Putnam presented concept of two-level games to integrate domestic structures, systematic opportunities and constraints, and foreign economy policy. Putnam's two level games consists of domestic level where the game is played between public authorities and social actors, and of international level where the game is played among governments (Putnam pp. 427-460), (Cohen 2008 p. 128). Putnam pointed out that the bargaining power of a state could be enhanced, if its rules can demonstrate that their domestic supporters would only accept a narrow range of outcomes (Katzenstein, Keohane and Krasner 2004, p. 668). Putnam also studied entanglement of domestic and international politics. Putnam takes a case of Japan in which the Ministry of Trade and Industry (MITI), the Economic Planning Agency, and some politicians within the Liberal Democratic Party attempted to promote business interest agenda, using U.S. pressure against the resistance of the Ministry of Finance (MOF) (Putnam 1988). Peter Gourevitch also pointed two ways in which the world economy could influence polities; the basic institutional structures of polities including governing norms and capabilities and strategic opportunities of different interest groups (Gourevitch 1978), (Katzenstein, Keohane and Krasner 2004, p. 668), where the norm is one of the important elements of the regime.

(Yoshihiro Nagata, Bureaucracy in the Power-Dependence of Domestic Politics and Linkage in Foreign Policy, IICSS2017Dubai)

Table 2 Comparison between 1 oney Networks and Emkage					
	Policy Networks	Linkage			
representative	Katzenstein	H.Kissinger			
Researchers	R.A.W. Rhodes	Joseph Nye			
		Robert Keohane			
Research Area	Administration	International Relations			
	Politics				
Objective	Intergovernmental Relations	International Relations			
	between Centre and Local	among States			
Common Concept	Linkages between governmental	Linkage between States			
	and other actors				
Actor	Bureaucracy,	States			
	Central Government,	International Organizations			
	Parliaments,	_			
	Politicians,				
	Interest Group				
	Local Government				

 Table 2 Comparison between Policy Networks and Linkage

This Table is made by the author based on Rhodes(1986a, 2006), Nye(2007), Keohane and Nye(1977) and Katzenstein(1978).

(Yoshihiro Nagata, Policy Networks of Central-Local Government Relations in the UK and Japan and Linkage of International Relations in the EU, IICSSHawaii2017)

The United Kingdom, France, Austria, Europe and United States have built World Order, Regime and Law, and brought Peace and Stability to the World. The principle, "Balance of Power" was built by Cardinal Richelieu, Cardinal Armand Jean du Plessis. In 1648, the Peace of Westphalia was signed in Westphalian sovereignty. Prototype of Balance of Power occurred in Italy in 16th century. After the Peace of Westphalia, the UK, France, Austria(Habsburg) and Prussia(Germany) built Regime and World Order by Balance of Power. The Congress of Vienna, Vienna System, Concert of Europe(1815) was built by Prince Klemens von Metternich, Charles Maurice de Talleyrand-Périgord and Viscount Castlereagh. Vienna System had harmonization, morality, legitimacy and justice. Chancellor Kaunitz-Rietberg, Haugwitz, William Pitt, Emmerich Vattel developed Balance of Power. William Gladstone and Otto von Bismarck built New World Order. About Balance of Power, Tory Party and Whig Party had conflicted. World Order are sustained by Regime, Law, rule of law and fundamental rights. Two Treatises of Government by John Locke, Leviathan by Thomas Hobbes and Albert Venn Dicey, Jennings advocated rule of law. Alfred Verdross, Hans Kelsen advocated Reine Rechtslehre.

Augustus and Agrippa built Principatus.

The Treaty of Dunkirk(1947), UK-France Alliance was signed. The Treaty of Brussels was signed, and Western Union(WU) was established(1948). I think Western Union(WU) is linked with NATO(OTAN), the North Atlantic Treaty Organization. Prime Minister Winston Churchill, Robert Schuman and Dean Acheson contributed foundation of ECSC(1951). I think ECSC is reincarnation of Vienna System.

EU and European Council President Charles Michel achieved recovery plan of coronavirus.

I think Politics are Mathematics, Multiple Variables of Sovereign State, government, citizens, politicians, local and bureaucracy.

Carl Friedrich Gauss constructed Gaussian integer. Évariste Galois developed Group theory. Kurt Gödel developed Gödel's incompleteness theorems.

John von Neumann and Alan Turing developed Computer, Von Neumann architecture and Turing machine. ARPANET(1960s) was computer network. I think Computer, Computer Network are linked with Politics.

The League of Nations(1920), U.S.-UK-France-Japan Treaty 1921(Four-Power Treaty), Atlantic Charter(1941), the United Nations(1945), G7 Summit are collective security. The Treaty of Paris(1951), Treaty of Rome(1957), Merger Treaty, Brussels Treaty(1965), European Council Fontainebleau(1984), Internal Market, Delors speech in parliament(1985), Single European Act(SEA)(1986), Maastricht Treaty, Treaty of European Union(1992), three pillars of European Union and Treaty of Lisbon(2007) brought regime. Japan-EU EPA(Economic Partnership Agreement), Japan-EU SPA(Strategic Partnership Agreement), TPP and Japan-U.S. TAG(Trade Agreement) are interdependence and linkage. Japan-U.S. Alliance, Japan-UK Alliance, Japan-UK Foreign and Defense Ministerial Meeting(Japan-UK 2+2), Japan-France Foreign and Defense Ministers' Meeting(Japan-France 2+2), US-UK-France-Japan ACSA are important. The Vienna Convention for the Protection of the Ozone Layer(1985), Kyoto Protocol(1997), Paris Agreement(2016), the Vienna Convention on Diplomatic Relations(1961), IPCC, UNFCCC brought Soft Law.

About Japan-EU EPA, Japan-EU SPA and TPP, Japan Government, Ministry of Foreign Affairs, Ministry of Economy, Trade and Industry and Keidanren promoted because of economic growth, interdependence and linkage, but JA, agricultural association opposed.

(Yoshihiro Nagata, Bureaucracy in the Power-Dependence of Domestic Politics and Linkage in Foreign Policy, IICSSDubai2017)

On April 2019, Japan and U.S. started bilateral negotiation, Japan-U.S. TAG. On August 2019, Japan and U.S. negotiated Japan-U.S. TAG on G7 Summit, France. On October 2019, Japan and U.S. signed Japan-U.S. TAG.

On June 2020, Japan and UK started bilateral negotiation, Japan-UK FTA. Japan-UK FTA will strengthen Japan-UK relations.

Ieyasu Tokugawa (1543-1616), Shogun, had built artistic regime to bring peace and stability, Pax Tokugawana. Nobunaga Oda (1534-1582) had brought a paradigm shift from Medieval Period to Early modern period.

In Edo period (1603-1868), Bureaucracy had supported Tokugawa Shogunate. Daimyo, Karo were Bureaucrats and Politicians in Japan. My ancestors are Daimyo, Ujikane Toda (1576-1655), Ujiyori Toda (1614-1686), First feudal Lord of Ogaki, Lord of Ogaki Castle.

My ancestor is Daimyo, Kazuaki Toda (1543-1604), Feudal Lord of Otsu, Lord of Otsu Castle, First Feudal Lord of Zeze, Lord of Zeze Castle.

In Edo period, Japan and U.S. Treaty of Peace and Amity was signed on March 1854.

Japan and U.K. signed Anglo-Japanese Friendship Treaty (1854) and Anglo-Japanese Treaty of Amity and Commerce (1858). Japan and France signed Treaty of Amity and Commerce between France and Japan (1858). Japan and Austria signed Treaty of Amity and Commerce between Austria and Japan (1869).

Bureaucrats and Politicians have supported Japan.

My family and I live in Kyoto and once lived in Vienna (Wien), Austria. I became Cool Forest Ambassador of IBFRA18 (IIASA, Austria). In 2018, I attended and presented at IBFRA18 (IIASA, Austria) as Cool Forest Ambassador.

Austria Federal President Thomas Klestil visited Japan in 1999. In 2019, Chancellor of Austria Sebastian Kurz visited Japan for the 150th anniversary of friendship between Japan-Austria.

In coronavirus pandemic 2020, Power-Dependence, Linkage of central-local government relations, domestic politics, and Interdependence, Linkage of International relations, Diplomacy become stronger.

Conflicts for Initiatives between Japan central government, prime minister's official residence and local government occur. Japan government declared state of emergence about coronavirus. But Local Government demanded government-led emergency declaration rather than local-led emergency declaration because local government demanded Grant of small and medium-sized companies implemented by central government. Budget of Local Governments became austerity budget. If local government implement Grant of small and medium-sized companies, many local governments will become financial collapse. Japan Government demanded local governments to implement Grant of small and medium-sized companies by local government, because local governments demand delegation from central to local. I

think that these politics are similar to British central-local relations in the Thatcher administration in 1970s and 1980s.

President Dwight David Eisenhower, John Foster Dulles, Robert McNamara, Edwin Reischauer, Kissinger, Nye, Keohane, Katzenstein, Graham Allison, Richard Armitage strengthened Japan-US alliance.

After Merger of Conservative Party(1955), Liberal Democratic Party, prime minister Yoshida-Ikeda-Miyazawa-Kishida, Kishi-Fukuda-Abe-Mori, Sato-Tanaka-Takeshita-Hashimoto, Kono-Nakasone Factions, made de facto regime change. The 55 system started.

Power Elite by Mills, Pluralism, Polyarchy by Dahl and Technocracy influence Japan Politics.

In 1944, Kitaro Nishida of Kyoto School(Kyoto-gakuha) advocated new World Order.

Japan Constitutional Law was influenced by British Westminster System, U.S., Germany and Austria.

I have researched Law, Domestic Politics and Diplomacy.

I have researched Interdependence, Linkage, Regime, EU, Soft Law, Law, Politics, Norm, Principle of Subsidiarity, Open Method of Coordination(OMC), Power-Dependence, Bureaucracy etc. in my Master's Degree Paper (Yoshihiro Nagata, 2013).

Keohane and Nye define "relationships of interdependence often occur within, and may be affected by, networks of rules, norms, and procedures that regularize behavior and control its effect.", "sets of governing arrangements that affect relationships of interdependence as international regimes."(Keohane and Nye, 1977)

In international finance, concept of Regime was introduced by Cooper in 1970s.

I think Norm is progressing, and concept of Norm is constancy. Concept of Soft Law is floating. EU(European Union) had adopted Soft Law. Soft Law was used to EU secondary legislation, and principle of implementation.

EU operates law by decision, Hard Law, and recommendation, opinions, non-legal binding acts, Soft Law. Hard Law is actually prioritized to Soft Law of EU, recommendation, opinions, OMC because Soft Law is not-binding.

EU governs indirectly by OMC, but indirect approach, Soft Law approach may cause the Member States non-compliance. EU demands Member States compliance by European dimension. The Member States sometimes prioritize National interest by history and culture.

EU has 3 principles, principle of subsidiarity, proportionality and conferral principle.

The norm which is standard of behavior and sometimes non-binding soft law is

remarkable property in the legal system of the EU. The soft law is juristically justified by the EU secondary legislation such as non-binding recommendation and opinion, and binding directive with harmonization in the Member States.

By Finnemore and Sikkink, who are scholars in the international relations and international organization, norm is defined as a standard of appropriate behavior for actors with a given identity. Furthermore, by Krasner, who is also a scholar in the international relations, norm is standards of behavior defined in terms of rights and obligations. Norm is an element of the regime. Regime is defined as a set of principles, norms, rules and decision-making procedures around which expectations of actors converge in the given area of international relations.

The legalization is discussed the field of international relations and international organization, concerning the soft law. Abbott, Keohane, Moravcsik, Slaughter and Snidal presented three dimensions of the legalization, i.e., obligation, precision and delegation and discussed degree of these dimensions.

The primary EU legislation is the Treaty on European Union (TEU) and the Treaty on the Functioning of the European Union (TFEU). The secondary EU legislation is composed of regulation, directive, decision recommendation and opinion (TFEU Article 288).

(Yoshihiro Nagata, Policy-Making Process of Higher Education and Vocational Training in the EU, ACE2014)

The Education Reform Act 1988 legislated the school budget by new funding formula, as the local management of schools (LMS) (Part I Chapter III). The Thatcher Administration proceeded delegation and control simultaneously, where the discretionary power of school budget is delegation and the funding formula is control. Relationship between the school budget and funding formula is similar to relationship between parental participation to the school board as delegation and national curriculum as control.

The delegation of the school budget is combined with control by new National Funding Formula, like the Education Reform Act 1988. Principle of the National Funding Formula is fairness, simplicity, consistency and transparency.

(Yoshihiro Nagata, Financial Controls in Education Policy of the UK, ACE2015)

The Education Reform Act 1988 is huge law which is said to be summary of the education policy in the Thatcher Administration.

This is delegation to the school. This Act also established City Technology College and City College for the Technology of the Art (105).

The Education Act 2005 states duty to inspect certain schools at prescribed intervals (5(1)). This section is applied to community, foundation and voluntary schools, community and foundation special schools, city technology colleges and city colleges for the technology of the arts (5(2)).

(Yoshihiro Nagata, Delegation and Intervention of Education Policy in the UK, ACE-

ID2015)

UK School consolidation was related to Grant Maintained School and City Technology College of Education Reform Act 1988.

Partnership between School and Local, Reciprocity, Subsidiarity, Mutuality in Education, Local Network, Partnership between Education and Welfare, Special Education Needs, Reciprocity and Subsidiarity in Education Act in UK, EU, Japan and U.S. are important.

Culture, Music, Olympic, Expo, Sport, Rugby, Igo(Go), Tea Ceremony, etc. build Soft Power.

I hope that kindness, altruism, sympathy will bring peace and stability.

Conclusion

I have researched Power-Dependence in central-local government relations, Domestic Politics and Interdependence in International Relations, Diplomacy, Linkage, Linkage strategy.

I have researched Bureaucracy, Soft Law, Norm, the principle of subsidiarity, Law, Policy, Politics, Balance of Power, Collective Security and Regime etc.

I think Diplomacy and Domestic Politics are related each other.

I think Balance of Power is applied to Domestic Politics and Diplomacy.

Coronavirus pandemic 2020 may damage citizens compared with Plague(Pest) from 14th century to 17th century.

Kärntner Straße and Der Graben are in Vienna(Wien) Austria. St. Stephen's Cathedral is near Kärntner Straße and Der Graben. On 17th century, Plague Column was built in Graben, praying the end of Plague(Pest). I pray and hope the end of coronavirus pandemic.

After Coronavirus pandemic, New Cold War and clash of civilization may happen. Civilization should prepare for New Cold War and clash of civilizations. World Order may change. Many companies will go bankrupt, unemployment will increase and lifestyle will change. Civilizations should advance in preparation for second wave, third wave of coronavirus pandemic.

I think that core culture of UK, U.S., France and Europe is Democracy, human dignity, human right, order and the rule of law.

I hope U.S., UK, France, Austria, Germany, Europe and Japan make strong partnership and alliance in diplomatic, political, legal and cultural fields.

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Hemingway and Dos Passos: The 1930s

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Abstract

Herbert Solow's declaration (of April 1938) in "Substitution at Left Tackle: Hemingway for Dos Passos" (Partisan Review 4- April 1938, pp 62-64) refers to the idea that Dos Passos, who had been strongly leftist since 1916, began in the second half of the 1930s after a period of aloofness to move away from that philosophy while Hemingway began to move towards it, thus falling into the popular front's anti-fascist ideology.

Keywords: Leftism, Popular Front, Fascism, Proletariat, Socialism

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Introduction

Herbert Solow's declaration (of April 1938) in "Substitution at Left Tackle: Hemingway for Dos Passos" (Partisan Review 4- April 1938, pp 62-64) refers to the idea that Dos Passos, who had been strongly leftist since 1916, began in the second half of the 1930s after a period of aloofness to move away from that philosophy while Hemingway began to move towards it, thus falling into the popular front's anti-fascist ideology. To begin, U.S.A. spells out Dos Passos' suspicion "of anyone with rank and position, distrusting all those who held economic or political power...[his concern is] how to preserve the sanctity of the individual" (Pells, p. 237). He saw communism becoming a system, a huge establishment (similar to industrial capitalism) of hypocrites hoping to rise within the Communist hierarchy without sensitivity to ordinary human needs. As evidenced in the execution of Sacco and Venzetti, Dos Passos asserted his famous concept of two nations, two Americas: The owners, who had the police power and ran the big institutions, and the dispossessed masses of people. The case of Sacco and Venzetti is symbolic of the struggle between the "two nations" of ordinary people versus the institutions.

The Big Money" (1936) shows the characters emerging defeated as a result of this struggle. Exhausted by her futile struggle to save Sacco and Venzetti, Mary French goes to bed and dreams that the entire world is falling apart. Conversely, Charley Anderson chooses to leave his potion as a mechanic and seek "the big money." He thus becomes a stockbroker but is eventually beaten by the capitalist system. He wishes that "[he was] still tinkerin' with that damn motor and didn't have to worry about money all the time." Juxtaposing Mary's hope for socialism with Charley's fall illustrates two kinds of failure: the futility of the socialist cause, and the flimsy ambitions of success promised by capitalism. This conveys the sense of disillusion Dos Passos held against both sides (the left and right) which ultimately became institutionalized. His concern shifted to the "lone individual," Daniel Aaron Rontes. Kazin notes, "the heroes are always broken, and the last figure in U.S.A., brooding like Dos Passos himself over that epic of failure, is a starving and homeless boy walking alone up the American highways" (344).

Dos Passos' suspicion of the Communist agenda was intensified by the execution of his friend, Jose Robles, after having been charged with being a Fascist spy. Robles had left his position at Johns Hopkins to fight with the Loyalists in Spain. Arguing that Robles was murdered because "Russian secret agents felt that Robles knew too much about the relations between the Spanish war ministry and the Kremlin and was not, from their very special point of view, political reliable" (qtd in Aaron, 344), Dos Passos wanted to expose and politicize the murderous Communist agenda held by his friends. However, Hemingway told him that he would not have been executed by the Loyalists if he had not deserved such treatment. This clearly marks the point of departure in their friendship.

Hemingway criticizes Dos Passos' disillusionment with the extreme left party in the character of Richard Gordon ("To Have and Have Not" (1937)), a proletarian writer who is currently writing a novel about a strike in a textile factory. Here, Gordon's wife, Helen, says that he is "changing your politics to suit the fashion." (150). Hemingway had been maintaining his "professional aloofness" (Cohen) in the first

half of the 1930s, since he maintained the position that politics and art do not mix. He wrote in a letter in 1932, "If the boys swing to the left in literature you may make a small bet the next swing will be to the right and some of the same vellow bastards will swing both ways." (He adds in this letter that Dos Passos "doesn't swing. He's always been the same") (qtd, Wgner, 48). Hemingway's quiet move to the left, possibly motivated by a realization that his writing was out of touch with the current plight of humanity, began with the publication of "Who Murdered the Vets?" (1935) in the New Masses. In this article, he writes with indignation about U.S. Army veterans carelessly left by the Government in the Florida Keys to perish because of hurricanes. Hemingway sees the veterans as worthless in the eyes of the Government since "yacht owners know there would be great danger, unexpected danger, to their property if a storm would come (hence you do not see them and their yachts in the keys during this season) ...veterans, are not property. They are only human beings,...all they have to lose is their lives." Although this is not a leftist article but a complaint against the government, the leftist camp saw it as a move toward the left; "[the article] suggested that Hemingway was going somewhere..." Hicks commented (qtd, Meyers 213).

Hemingway mentions these veterans again in his 1937 novel, "To Have and Have Not," as battered individuals having no odialogue and drinking away their meaningless lives under the auspices of a callous government. In this novel, Hemingway can be seen to move even closer toward "social consciousness." He writes about proletarian group solidarity and "brotherhood" of the "conches," and about proletarian writers such as Richard Gordon. Most importantly, his main character, Harry Morgan, is an ordinary man, which makes him a unique character among Hemingway's heroes. Hemingway made this character, the dying Morgan, utter the message of solidarity carried by the book: "No matter how a man alone ain't got no bloody f--ing chance."

Hemingway became attracted CPUSA after its official announcement in August 1935 via "The Popular Front" by Georgi Dimitroff, that they would abandon their explicit revolutionary activities of the Third Period and join the progressive resistance against Fascism. He viewed the Communists as playing an important role in fighting fascism in Spain and considered it a necessary cure. Yet Hemingway makes it clear that the Communist anti-Fascist agenda is what attracted him rather than its revolutionary ideology. Harry Morgan's opinion about the revolutionary Cubans as a bunch of murderers is unique: "What the hell do I care about his revolution? F-- his revolution. To help the working man he robs a bank and kills a fellow works with him and then kills that poor damned Albert that never did any harm. That's a working man he kills." And Robert Jordan, in "For Whom the Bell Tolls," admits that he is only "antifascist." In "Hemingway: the 1930s," Reynolds writes "[Hemingway was] neither right nor left, but opposed to government of any sort, he trusted working-class people, but not those who would lead them to the barricades and not the masses en masse" (which makes him consistent with the position he noted in his 1932 letter mentioned previously) (211). However, Herbert Solow recognizes that Hemingway started to "rise to 'beatified' heights for critics like Gold, Hicks, and Cowley" (Cohen).

"The Fifth Column" stresses the urgency of fighting fascism in Spain even after the fascists had won the war. To be in the "Fifth Column" implies being strictly dedicated to the cause; therefore, Philip must get rid of his mistress whom he intended to marry,

since she takes him away from his duty: "we're in for fifty years of undeclared wars and I've signed up for the duration." Philip's statement echoes Hemingway's address in the second American Writers Congress of June 1937 that "no true writer could live with fascism" (Reynolds, 270). In his preface to "The Fifth Column," Hemingway wrote, "it will take many plays and novels to present the nobility and dignity of the cause of the Spanish people." This status of Spain in Hemingway's mind looms in the background of "For Whom the Bell Tolls." The opening lines of John Donne, "All mankinde is of one Author, and is one volume...No man is an island, entire of it selfe," summarizes the era's cult of that group. The hero, Robert Jordan, finds a noble cause in war and in fighting the injustice symbolized by the Fascists. He is "not a real Marxist." He hates authority and believes "in Liberty, Equality, and Fraternity...in Liberty and the Pursuit of Happiness...." He tells himself, "If this war is lost all of those things are lost." Therefore, Jordan accepts "Communist discipline...[of following order and trying] not to think beyond them... for the duration of war." He follows the Stalinist ideology of "means justify the end," that there is a need to kill people in the interest of a higher cause, which brings the concept of martyrdom to the other end of the equation. The conclusion stresses the theme that in sacrifice and martyrdom, one enters into a spiritual oneness with the group and the universe: "one and one is one." Ray West calls this remark "the end of despair and futility" (qtd in Hoffman, 101). The novel was received with applause by the left, since it fulfilled the expectations of those among the leftists. Daniel Aaron writes that Hemingway had "Become the party's favorite literary name" (351).

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Who is Oliver? Unexecuted Wills and Threatened Legal Rights in Oliver Twist

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Abstract

In this paper, I examine the unexecuted wills and the difficulty in exercising legal rights in Oliver Twist (1837-39). In Dickens's novels, the making and exercising of wills are extremely important because these actions are required for inheritance. Their choice of the beneficiary to their fortune exposes a character's desire for money, affects and manipulates their human relationships and life events, and propels the plot. Oliver Twist focuses on Monks's trick for depriving Oliver of his inheritance by annulling the wills and evidence that otherwise would have proved Oliver's identity and heirship. Monks's scheme goes considerably well because he effectively robs Oliver of the means of claiming his legal rights. He is debauched but clever enough to understand that every legal claim is void without documented evidence or witnesses, whereas Oliver's parents cannot properly make a will because of their obscurity and untimely deaths. Oliver's bitter experience demonstrates that not all people are equal under the law; the objective of the law is not justice, and the evil and wicked can lawfully deprive the good and honest of their property. The law and wills in Oliver *Twist* are not powerful monsters; they are controlled and arbitrarily put into practice depending on individuals' convenience and interests.

Keywords: Dickens, Family, Inheritance, Law, Money

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Introduction

In this paper, I focus on unexecuted wills in *Oliver Twist* and the unfairness in exercising legal rights. As Anny Sadrin mentions, a father's last will drives the plot in most of Dickens's novels (Sadrin, 1994, p.13). Making and exercising a will is crucial because these actions are required for inheritance. Their choice of the beneficiary to their fortunes exposes Dickens's characters' desire for money, affects their human relationships and life events, and propels the plot. For example, Jarndyce v. Jarndyce is a central plot element in *Bleak House*, and many people are involved in this case, wasting their money, time, and energy. Mark Fortier argues that inheritance has played an important role in maintaining a patriarchal society in which the dead control and dominate their offspring (Fortier, 2019, p.57). Bleak House is an undesirable example in which individuals' decision-making ability is dictated by persons long-dead. On the other hand, thanks to a sudden inheritance, the Micawbers are released from a debt-ridden life, and the Dorrits leave the Marshalsea Prison. Pip is promoted from a blacksmith to gentleman by a gift from Magwitch. It is not until Pip gives up his right to Magwitch's fortune that he acquires independence and fortitude. In Dickens's novels, money does not always guarantee happiness, but, with a moderate amount of money, people escape from care and worries and maintain their decency. Inheritance of a large fortune dramatically changes the characters' lives and future.

Oliver Twist's fate is likewise significantly affected by property inheritance. As Catherine Waters points out (Waters, 1997, p.29), the plot of *Oliver Twist* centers on the discovery of Oliver's identity and the recovery of his legal claim to his family name and fortune. His suffering runs parallel with the deep hatred felt by Mrs. Leeford and Oliver's half-brother Monks toward those connected with Mr. Leeford and Oliver's mother, Agnes Fleming. Except for the final part of the book, their scheme succeeds. The rescue of Oliver entirely depends on luck and third-party favor and help, for instance, by Brownlow, Rose, and Nancy. I choose to discuss the plight of Oliver because of his unclear parentage and legal status, which enable Monks's revenge.

The social stigma imposed on Oliver and his mother Agnes

Oliver Twist begins with the scene in which an unnamed young woman gives birth to a boy—later named Oliver Twist—in a workhouse. The descriptions in the first chapter predict the baby's forthcoming humiliation, misery, and unhappiness. First, he is born in a workhouse—the abode of the lowest social class in Victorian Britain. The passage "Now, if, during this brief period, Oliver had been surrounded by careful grandmothers, anxious aunts, experienced nurses, and doctors of profound wisdom, he would most inevitably and indubitably have been killed in no time" (ch.1), suggests that Oliver has no relative and guardian who is happy to take care of him. The narrator goes on as follows: "The result was, that, after a few struggles Oliver breathed, sneezed, and proceeded to advertise to the inmates of the workhouse the fact of a new burden having been imposed upon the parish" (ch.1). At the end of the first chapter, Oliver is "a parish child—the orphan of a workhouse—the humble, half-starved drudge—to be cuffed and buffeted through the world—despised by all, and pitied by none" (ch.1). Nobody welcomes Oliver's birth. For instance, Old Sally is drunk and does nothing helpful for midwifery. The parish surgeon offers minimal help, and after Oliver is born, he tries not to involve himself with Oliver anymore. Although low-skilled and not successful, he belongs to the middle class and shows little sympathy for the poor of obscure parentage.

As early as the first chapter, the stigma around extramarital affairs and natural children is represented by the surgeon's attitude toward Agnes. He shows her some kindness because he is generous enough not to speak ill of the dying. However, as soon as she dies, he confirms she is a "Miss nobody" and does not have a wedding ring and concludes that she is a sinful woman, and her postnatal death is a punishment for extramarital sex. Evidently, he despises her and her baby.

While Oliver is in the workhouse, except for when he is forced to request further gruel, he is not on bad terms with his fellow boys, and they do not disapprove of his obscurity. Their common enemies are hunger and repeated punishments. They are all social failures and have no time to enquire into the private affairs of others. However, once Oliver starts in life, he meets those who abuse him for his origins more harshly than the surgeon. The first example is Noah Claypole, a senior apprentice in Sowerberry's shop. He is from a charity school and dependent on a local charity. His social standing is as low as Oliver's, but he believes that he is superior and entitled to insult Oliver's background merely because Oliver is a natural child of unknown parentage. Although his parents are low-born and poor, Noah's parentage is known to the public, and he is a legitimate child anyhow. He has the following conversation with Oliver:

'Yer know, Work'us,' continued Noah, emboldened by Oliver's silence, and speaking in a jeering tone of affected pity: of all tones the most annoying: 'Yer know, Work'us, it can't be helped now; and of course yer couldn't help it then; and I am very sorry for it; and I'm sure we all are, and pity yer very much. But yer must know, Work'us, yer mother was a regular right-down bad 'un.'

'What did you say?' inquired Oliver, looking up very quickly.

'A regular right-down bad 'un, Work'us,' replied Noah, coolly. 'And it's a great deal better, Work'us, that she died when she did, or else she'd have been hard labouring in Bridewell, or transported, or hung; which is more likely than either, isn't it?' (ch.6)

Oliver has no means of defending his mother against Noah's insult to her and his claim that she deserves punishment and death, except to knock Noah down. A court, including Bumble and a parish officer, is promptly founded. The Sowerberrys ignore Noah's offense and condemn Oliver's attack on Noah, referring to Oliver's parentage and asserting that his mother was a bad woman. The following is a part of their ill remarks about her:

'He called my mother names,' replied Oliver.

'Well, and what if he did, you little ungrateful wretch?' said Mrs Sowerberry. 'She deserved what he said, and worse.'

'She didn't,' said Oliver.

'She did,' said Mrs Sowerberry.

'It's a lie,' said Oliver. (ch.7)

This scene illustrates widespread aversion to extramarital affairs and natural children among the lower classes. They seem to go into hysterics and combine whatever they dislike about Oliver with their aversion to illicit affairs, reflecting Dickens's distaste for the prevailing attitude toward illegitimate children (Adrian, 1984, p.91). Sowerberry is not always unkind to Oliver, but here he heavily beats Oliver because taking his side would mean approving of a natural child. Oliver's powerlessness indicates that those who have an extramarital affair are denied respect, and natural children suffer for their parents' sins.

At the end of the book, it is clarified that Rose Maylie is Oliver's aunt, and she also suffers from the assumption of being a natural child of a bad woman because of Mrs. Leeford's trick. She understands well that the lower classes unthinkingly attack extramarital affairs and bully illegitimate children, as exemplified by the Sowerberrys. Thanks to Mrs. Maylie, Rose is saved from abuse and poverty. However, possibly because of repeated insults to her identity, she internalizes the prejudice against natural children and decides not to accept Harry's love for his worldly success. She says, "... there is a stain upon my name, which the world visits on innocent heads. I will carry it into no blood but my own; and the reproach shall rest alone on me" (ch.35).

Arthur Adrian notes that here Rose gives voice to Dickens's disapproval of the prejudice against illegitimacy (Adrian, 1984, p.91). Hilary Schor writes that the reason for Rose's refusal to marry Harry Maylie is not entirely because of the shame of marrying an illegitimate and penniless orphan but also out of love for her natural and foster mothers and her pride in not clinging to him (Schor, 1999, pp.26–27). However, even after her parentage is known, she never unlearns the shame of her sister's affair with a married man and having a natural son, accommodating society's views. Thus, she does not immediately accept Harry's proposal:

"That a sense of his deep disgrace so worked upon my own father that he shunned all—there, we have said enough, Harry, we have said enough." (ch.51)

Harry is heroic enough to give up venturing into politics and chooses a moderate living instead as a country clergyman for the woman he loves. His decision is described as affectionate and noble, but his sacrifice indicates that the social stigma on natural children remains permanent.

The revenge of Mrs. Leeford and Monks

In contrast to Agnes and Oliver, Mrs. Leeford and Monks are nasty and egocentric. It is hinted that Mrs. Leeford has been unfaithful while being separated from Mr. Leeford. Monks falls into bad company from an early age. However, their bad behaviors are not criticized at all, and their desires and needs are always respected because they are Mr. Leeford's legitimate family. Mr. Leeford's critical condition is reported to Mrs. Leeford, and she takes care of all of his property arrangements after his death. She burns a will that is unfavorable to her and wastes his fortune, together with Monks. She makes every possible attempt to eliminate the trace of Agnes and her family and send them to the depth of misery. Despite her anger and hatred, Mrs. Leeford cleverly keeps the letter in which Mr. Leeford confesses his illicit love to prepare for further revenge. She carefully examines the evidence, destroys some, and preserves the rest. Later, Brownlow clarifies the process of Mr. Leeford's death and Mrs. Leeford's usurpation. However, the loss of Oliver's property is not reimbursed, and he gives up half of his inheritance. Her revenge succeeds on the whole.

The contrasts between Mrs. Leeford and the Flemings show that, under the law, formality is valued much more than reality. Mr. and Mrs. Leeford are separated for a long time, and their marriage has lost substance. However, as long as Mrs. Leeford is not legally divorced, she is allowed to abuse her right as a legitimate wife, and her interests are valued over those of the Flemings. On the other hand, owing to an illicit relationship, the Flemings can do nothing effective to counterattack Mrs. Leeford. Mr. Fleming does nothing to defend Agnes, blindly believes Mrs. Leeford's ill remarks, and abandons his family name and property. Agnes runs away, gives birth to an unwanted child, and dies as a "Miss nobody" in the workhouse. Rose puts up with the rumor of being illegitimate. Although Mr. Leeford and Agnes sincerely love each other, their affair is regarded as inappropriate in their lifetime as well as after their death. Sadrin comments that Oliver will pay dearly for the sins of his parents, and he will never be called by his father's family name (Sadrin, 1994, p.43). This suggestion is correct because Brownlow adopts Oliver, and Oliver is legally saved from the disgrace his parents incur.

On her deathbed, Mrs. Leeford leaves Monks all secrets and evidence, and he takes over her revenge. George Gissing wrote in *Immortal Dickens* (1925) that one of the two blemishes of *Oliver Twist* is the characterization of Monks, and his intrigue is absurd (ch.4;4). However, Gissing ignores the grudge of a woman whose husband is stolen, although she does not love and live with him, as well as Monks's loyalty to his mother. Monks perfectly inherits his mother's malice and vindictiveness and likewise destroys and preserves evidence. He bribes Mr. and Mrs. Bumble into selling him Agnes's wedding ring and locket and orders them to keep a secret. He is prudent enough to provide against emergencies and entrust Fagin with the evidence. As Juliet John says (John, 2001, p.124), Monks is a petty villain but wise enough to understand every legal claim is void without evidence. To counterattack him, all documentary proof is destroyed or hidden; Oliver has to resort to eavesdropping and peeking to save himself.

Unlike Mrs. Leeford and Monks, Mr. Leeford cannot conduct legal procedures properly. He dies offstage and is a shadowy character. Kelly Hager suggests that the failure of his marriage and his affair with Agnes are hidden well in the text (Hager, 2010, p.56), probably so as not to arouse the antipathy of Dickens's readers toward illicit love and illegitimacy. However, if his behaviors are analyzed in detail, he is no doubt weak-willed and imprudent. Waters notes that Oliver's illegitimacy causes his initial misery and misadventures (Waters, 1997, p.32) but ignores Mr. Leeford's faults. Hager explains that before the Divorce Act of 1857, divorces were to be granted by Parliament, and reasons were limited to adultery and were extremely expensive. However, well-off men without unfaithful wives could virtually end their matrimony by having a conveyancer draw up a separation agreement (Hager, 2010, p.37). However, there is no sign that Mr. Leeford makes such an arrangement in advance.

Purely motivated by his sexual desire, he has an affair with Agnes without letting her know that he is married, and this makes the Flemings and Oliver unhappy. He might love her, but, ultimately, he seduces her by hinting at marrying her someday and eventually plans to run away with her, reducing her to the status of a mistress. Although his marriage breaks up, his behavior is contrary to accepted morality. Moreover, his carelessness is seen in the process of making a will. As soon as he falls ill in Rome, he draws up a will and appoints Brownlow as the executor but takes no measure so that the letter is sure to be sent to Brownlow. He does not understand that a will is void without being acknowledged by the third party. Unlike Monks, he lacks caution and hardly attempts to leave a positive proof. The non-execution of his will is caused by his inability to take legal action properly. Oliver is a victim.

The availability of laying legal claim

The availability of laying legal claim depends on environment and social standing, as well. I would like to examine the cases of Agnes and Old Sally. Agnes runs away from home and drops out of the middle class. Without friends and relatives, she gives birth to a baby in a workhouse—the abode of the lowest social group. On her deathbed, all she can do for the baby is pray for divine protection and entrust her wedding ring and locket—the only clue to Oliver's identity—to anybody nearby. It is Old Sally, and, unsurprisingly, she misappropriates them. Ironically enough, upon death, Old Sally likewise leaves the ring and locket to Mrs. Corney to be disposed of by Monks. These cases demonstrate "the food chain" (Richardson, 2012, p.279), to borrow a term from Ruth Richardson, in which the weak are preyed upon by the strong. Located at the bottom of the chain, the poor and obscure such as Agnes and Old Sally are not allowed to document their will and cannot find an appropriate executor who is sure to exercise their oral will. It is almost impossible for the weak to lay legal claim to anything.

Chapters 49 and 51 in *Oliver Twist* bring climactic solutions to mysteries connected with Oliver's identity. Brownlow does everything possible to expose Monks's villainy and recover Oliver's inheritance by making full use of legal action. He investigates Monks and goes to the West Indies. He meets witnesses, for instance, Nancy and Old Sally's fellow inmates. He writes down the details of Monks's defrauding and allows Monks to sign a statement in public. He does not repeat Mr. Leeford's failure. Contrary to the will, he offers Monks one half of what was left of the property, respects the legitimate elder brother, and cuts his connection with Oliver. Despite being a minor character, Mr. Grimwig definitely contributes much with his legal knowledge and inquiry capabilities. Monks's hatred toward Oliver is unchanged, but once the positive proof is ready, he is willing to tell the truth:

'Set your hand to a statement of truth and facts, and repeat it before witnesses?'

'That I promise too.'

'Remain quietly here, until such a document is drawn up, and proceed with me to such a place as I may deem most advisable, for the purpose of attesting it?'

'If you insist upon that, I'll do that also,' replied Monks. (ch.49)

'This is a painful task,' said he [Brownlow], 'but these declarations, which have been signed in London before many gentlemen, must be in substance repeated here. I would have spared you the degradation, but we must hear them from your own lips before we part, and you know why.'

'Go on,' said the person addressed [Monks], turning away his face. 'Quick. I have almost done enough, I think. Don't keep me here.' (ch.51)

Waters asserts that from the beginning Oliver's good birth and natural virtue are represented by his face and language (Waters, 1997, pp.29–31). However, these factors have no evident capability to return Oliver to where he should be, as Monks says, "what then?... a fancied resemblance in some young imp to an idle daub of a dead man's" (ch.49). The dialogue between Brownlow and Monks shows that in legal proceedings, proof is everything. Without proof, facts cannot be found, and an individual's desire and wishes matter little.

Conclusion

The difficulty in discovering Oliver's identity and retrieving his inheritance suggests that not all people are equal under the law. Oliver has been nobody, and his social standing and inheritance are only restored through luck. Legal rights of the poor and weak can be easily violated, as seen in the cases of Agnes and Old Sally. Even though one can afford to make a will, it is not always valid and executed. Wills do not guarantee everything, and they can be easily destroyed. The objective of law is not justice, and the evil and wicked can lawfully deprive the good and honest of their property. In *Oliver Twist*, laws and wills are not monsters that ruin human beings; they are controlled, and arbitrarily executed, depending on individuals' convenience, greed, and interests.

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A Cross-Cultural Analysis of Self-Examination in Shakespeare's Hamlet and Chinese Philosophy and Tragedy

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Abstract

Western culture and Chinese culture are two completely different cultural systems in the world, while both of them can be analyzed together at a microscopic level. Although the protagonists in Chinese drama are not as complex as in Shakespearean drama where the characters are shaped by more than two aspects, the struggle of personality can be displayed in both. Consequently, in this paper, I will argue that the ideology of the self exists in Hamlet and Confucian texts. More specifically, through a comparison of Confucian ideology with western ideology, Hamlet can be analyzed in a cultural way that separately compares western ideology and Confucianism, Chinese drama and Shakespearean drama, and thus I will argue that some special characteristics belong to both Hamlet and Confucianism such as self-fashioning, self-revising, self-examination, and the desire to achieve an equilibrium (the "middle course"). I will then particularly analyze the tragedy of Ophelia, which relates Shakespearean drama with Chinese drama. This tragedy differs from Hamlet's and is an unadulterated and deep tragedy for all. Since Shakespeare's eminence was located in his creation of multiple selves, when analyzing Hamlet, we can also analyze the selves in it, and then compare it with the corresponding consciousness in Confucianism to conduct cross-cultural communication.

Keywords: Shakespeare, Self-Awareness, Cross-Cultural, Philosophy

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Introduction

The purpose of writing this paper is to combine my own experience and ideas to explore the human behavior and qualities in the great dramas of the Renaissance, and to bring a kind of inspiration to contemporary people. In the process of continuous research, I associated the consciousness of self-examination in Chinese Confucianism with Hamlet through analyzing Hamlet's behavior. Consequently, my tutor believes that this paper includes very interesting and insightful points.

Body

Under the influence of multiple factors such as cultural circumstances, Chinese drama and Shakespearean plays have a lot of different characteristics. Tragedies and comedies in Shakespeare's drama and traditional Chinese drama shows the obvious discrepancy between the two. Firstly, in Shakespeare's tragedy, the main characters are heroes such as kings or princes who do not need to obey anyone, while in Chinese tragedies, morality is the main theme (Zhang, 24-26). In the former, the protagonist has a tragic flaw and is not morally perfect. In the latter, the protagonist is morally perfect who is virtuous and loval. Secondly, Shakespeare's tragedy has all kinds of conflicts and paradoxes, and it is difficult to classify them as good or bad, while Chinese tragedies present stereotypical conflicts and divide the world into good and evil (Zhang, 27-29). Thirdly, Shakespeare's heroes always act on their initiative or have more inner monologues because they have greater freedom of choice, while Chinese traditional protagonists do not possess such great inner conflict (Zhang, 30-31). Finally, although traditional Chinese drama can create a tragic atmosphere, they always end with a happy ending, and Shakespeare's plays do not possess this condition (Zhang, 32-33). Consequently, by comparing the differences between Chinese drama and Shakespearean drama, the characteristics of Shakespeare's drama become clearer. However, existing differences not mean that they cannot relate with each other. For instance, Zhang states that Chinese scholars of Shakespeare often regard Hamlet as a Confucian hero. According to Zhang, most Chinese scholars analyze Hamlet in connection with his family and social identity, and ignore his hesitation as the essence of human nature. Then how can we analyze Hamlet in a Confucian way?

When Hamlet is analyzed using cultural approaches, Hamlet is analyzed through the lens of Confucianism. According to Zhang, though Confucianism declined during the Chinese Cultural Revolution in the mid to late twentieth century, traditional Chinese culture still plays an important role in the social and cultural practices of the Chinese today(211). Zhang's analysis shows that it can be said that Confucianism is still a means for Chinese people to analyze specific behaviors. For example, Zhang states that Confucianism makes Chinese scholars focus on Hamlet's positive qualities, but that ignores his negative qualities, such as his hesitation and vacillation, which Chinese scholars attribute to the corrupt society rather than to Hamlet's inner nature (Zhang, 214). However, it is important to note that this kind of analysis of two different cultures should occur independently. We cannot forcibly mix two completely different cultures into a whole, nor can we take the correspondence between the two cultures as a matter of course. Instead, the goal should be to maintain a multiplex and dialectical comprehension. Therefore, when we use cultural means to analyze Hamlet, the methods and Confucianism are inseparable. In this way, the

analysis of self-awareness can also be analyzed and compared.

Some early self-conscious bodies have self-fashioning and self-revision. Looking through the history of selves, while self-consciousness is not as strong as it is in modern times, selves certainly exist in the 16th century, as Greenblatt states(1-2). According to Greenblatt, it is easy to recognize that the characters in Hamlet also possess self-awareness. No matter what kind of aspect they are changing, they are all thinking about themselves in a way that cannot be separated from reality. More specifically, in Shakespeare's time, the modern sense of self was developing in a variety of ways via self-fashioning and self-revision. In the 16th century, the shaping of human identity was regarded as a manipulable, ingenious process (Greenblatt, 2). At this time, the term "fashion" was considered to have formed itself. Nevertheless, the process of self-fashioning is also influenced by the external environment, since the world in *Hamlet* is not one far away from society or without God (Greenblatt, 2). The protagonists have unconstrained subjectivity, but are defined by their present society and ideology (Greenblatt, 256). However, according to Bloom, Hamlet's journey closely approaches revising the sense of "selfsame". He changes his will after doing "self-overhearing", rather than precisely fashioned by environment (411). Consequently, he argues that Hamlet does not do "self-fashioning" but "self-revision". This process of self-revision is reflected in Hamlet's hesitation, which affects his choices on the road of revenge and contributes to the remarkable tragedy of Shakespeare. In this sense, although those self-conscious are inconsistent, Hamlet indeed possess from the beginning to end.

A key aspect of self-fashioning and self-revision that Confucianism shares with Shakespeare is the concept of self-examination. In Confucianism, Tsang states, "Thrice daily I ask myself: Have I been unfaithful in dealing with others? Have I been untrue to friends? Do I practice what I preach (Analects, 1.5)?" It can be interpreted that self-examination exists in Confucianism since the superior man, the so-called gentleman in Western countries, is perfecting himself through constant self-examination in order to achieve a state of balance. In Confucianism, self-examination, as the name implies, means introspection, and it is not a simple judgment of right and wrong or good and evil, but resolutely positive, guiding people to develop in a good direction. Moreover, in Confucianism self-examination is more directional than self-fashioning since it enables people to choose positive people or things from their surroundings to learn and think. The Master said, "At the sight of worth, think to grow like it. When evil meets thee, search thine own heart (Analects, 4.5)." And the Master also said that "walking three together I am sure of teachers. I pick out the good and follow it; I see the bad and shun it (Analects, 7.10)." That means, becoming a superior man or perfectly self-examination, is more dependent on individual autonomy than being blindly affected. Individuals are autonomous and selective when choosing "teachers".

Incorporate the ideas in this passage into the following paragraph on Hamlet:

When Hamlet is on the boat to England and sees Fortinbras' army invading Poland, he is inspired to take action as the soldiers do. In this way, Hamlet did derive bloody fighting determination from soldiers and made him made up his mind, returning home to report his father's revenge. Say in other words, he indeed learns something positive from "teachers". Proverbs that instruct people on how to talk and act in Confucianism can be used to interpret the nature of humans in Hamlet. The essence of introspection is to make itself behave following the existing basic moral and ethical concepts through repeated thinking. Shakespeare defines a similar concept. Hamlet's psychology is based on the concept of self-examination. In the text, Hamlet tells Rosencrantz that "for there is nothing either good or bad, but thinking makes it one (Act 2.2, Hamlet)." For this complex ideological reason, instead of considering the purpose of introspection as to become a perfect person, self-examination is simply the conclusion that things have a unique self-awareness.

Like Confucianism, Hamlet also exhibits this behavior of self-examination. In Act 3 Scene 1, Lord Polonius states, "We are oft to blame in this, 'Tis too much proved that with devotion's visage. And pious action we do sugar o'er the devil himself" (Act 3.1). Shakespeare directly indicates the subjectivity also can be a cloth to make someone change himself as being a different person. And the higher class or money people possess, the more possible it is for them to change their subjectivity. In this way, Hamlet seizes the opportunity to successfully revenge his father's death, but the inner self-examination makes him hesitate in the killing. In Act 3 Scene 3, Hamlet states, "when he is fit and seasoned for his passage? No! Up, sword, and know thou a more horrid hent" (Act 3.3). Although the audience would normally be against the idea of bloody vengeance. Shakespeare makes us sympathize with Hamlet and the ghost by portraying the behavior of Hamlet as charitable and against the ideas of fratricide and incest. In Hamlet's soliloguy in Act 2 Scene 2, he states that "but I am pigeon-liver'dand lack gall, to make oppression bitter, or ere this, I should have fatted all the region kites with this slave's offal" (Act 2.2). In this passage, Hamlet concludes his self-examination, explaining the reason for his inaction and hesitant mental state. Consequently, aside from the development of the plot, self-examination makes Hamlet develop a clear attitude towards the problem during his greatest monologue "To be, or not to be, that is the question" (Act 3.1). He is considering "Whether 'tis nobler", which can be seen as an equilibrium. In this sense, it is a way of self-examination, that "to suffer the slings and arrows of outrageous fortune, or to take arms against a sea of troubles". Ultimately, the purpose of self-examination is to implement an auto-criticism and achieve a state of inner balance.

Yet, Hamlet's metaphysical way of thinking is not completely defined by self-examination, which exists as only a part of subjectivity. As the Master said in Confucianism, "Study without thought is vain; thought without study is dangerous (Analects, 2.8)." In this sense, in the play Hamlet is in danger of hesitation and inaction and loses his ability of self-examination. Hamlet is in an unbalanced state after talking with the ghost and, although he tells others that he was going to "put an antic disposition on," in the end he is out of control (Act 1.5). Moreover, as we have seen, in Act 3.1, Shakespeare directly indicates that subjectivity is also can be a cloth to make someone change himself as being a different person. Even it does not reflect the existence of self-awareness. Francis Barker defined a kind of subjection in which self-awareness is not enough to be determined by subjective conditions such as location and expression, and manifested through the consciousness of incorporating physical action (Young, 36). For example, during a conversation with his mother, Hamlet killed Polonius by mistake. It was judged that Hamlet lost his mind at that moment, and his introspective cognition and behavior did not agree with one another. Before that, he gave up the opportunity to kill Claudius because of his "praying" (Act 3.3,). However, suddenly Hamlet kills Polonius after turning around. This absurd accident intimates that Hamlet did not posse self-examination at this moment. Thus

Hamlet cannot be regarded as completely defined by self-examination.

To some extent, equilibrium can be said to be the highest degree of self-examination. "The Golden Mean (Zhong Yong)", whether in ancient China or ancient Greece, has always involved the category of value judgment and value orientation, not the category of cognitive dimension (Huang, 3). Whether it is what Confucius calls "the Golden Mean" or Plato or Aristotle's "the Golden Mean", it is all used in the value dimension of life (Huang, 3). That means, from a dramatic perspective, equilibrium should more focus on personal value dimensions, such as how to achieve the middle course (best state) through self-examination (the guidance of knowledge and rationality). In Confucianism, it can be defined by *The Doctrine of the Mean*, representing moderation and objectivity. The master writes:

Therefore the superior man (Jun Zi) is watchful over himself when he is alone. While there are no stirrings of pleasure, anger, sorrow, or joy, the mind may be said to be in the state of Equilibrium. When those feelings have been stirred, and they act in their due degree, there ensues what may be called the state of Harmony. This equilibrium is the great root of which grow all the human actions in the world, and this Harmony is the universal path which they all should pursue. Let the states of equilibrium and harmony exist in perfection, and a happy order will prevail throughout heaven and earth, and all things will be nourished and flourish. (3)

This doctrine argues that humans are in a process of continuous self-improvement. From an environmental self-fashioning to true self-examination, the balance is finally reached. That means human should possess a sense of self-examination from outside influences. Not blindly being self-fashioning, but through self-revision to achieve a balanced state of introspection. The uncertainty of human nature makes this drama more colorful. While there is no such balance and perfection in Hamlet, one thing that evokes this sense of equilibrium is the power relationship in Hamlet. In *The Doctrine* of the Mean, Chung-ni, a Chinese Confucian scholar states, "The superior man embodies the course of the Mean is because he is a superior man, and so always maintains the Mean; the mean man acts contrary to the course of the Mean. The superior man's embodying the course of Man is because he is a mean man, and so always maintains the Mean. The mean man's acting contrary to the course of the Mean is because he is a mean man, and has no caution" (15). In this play, Claudius, who is "incestuous, adulterate and traitorous man", can be defined by the term "mean man" (Act 1.4). He killed the old king who is a perfect man, through a wicked and evil scheme. Although he has repented and confessed in the play, when Hamlet threatens his interests, he still chooses to kill Hamlet. The mean of Claudius, which is nature thing to him, makes him be shameless. His nature determines his impudent. It also proves that Claudius cannot achieve self-examination or equilibrium. In fact, the Golden Mean is just an extremely ideal state, and only a few of the characters in Hamlet can follow them. To some extent, drama is the style of analyzing the characters and life, which is closer to reality. Therefore, over-interpretation through the perspective may be woefully counterproductive.

Back to Self-examination, it does not only affect Hamlet, but also indirectly influence Ophelia. Consequently, Ophelia becomes the most tragic character in *Hamlet* and even in traditional Chinese drama. As I mentioned before, the characters in Shakespearean drama are complicated, while Ophelia seems to be the exception. Two indirect factors are to be found in the experience of Ophelia. To begin with, she

accidentally knows that her father was killed by Hamlet. Consequently, she becomes insane and finally commits suicide out of desperation. Moreover, Ophelia is partly tricked by Hamlet in their unrecognized relationship. In this way, Ophelia is hardly in a dominate position, and is forced to learn so-called truths-that her lover suddenly no longer loves her, and even her father is killed by him. Meanwhile, compared to the male characters, her behavior is impeccable without any calculations, and certainly, there is no blood on her hands. As Zhang states, "Ophelia, as a model of a perfect and innocent human being, has been killed by herself, so that people must pitifully bring unrestrained sadness back to Ophelia herself" (29). Significantly, the case of Ophelia also corresponds to characteristics of traditional Chinese drama. The protagonists of traditional Chinese tragedies often encompass women, and the "tragic mood" is motivated by "the suffering and destruction of the women" (Zhang, 24). Moreover, one major theme of traditional Chinese tragedy is about the "sorrows of gie (concubines, or women from the middle or lower classes) over their misfortunes in love" (Zhang, 24-25). In this way, while Ophelia cannot be defined by a true lover of Hamlet, it is easier to regard Ophelia as a Confucian tragic character, as she resembles the characters in Confucian works. There are many such proverbial female roles in Confucian literature, such as Lady Yang (a Chinese tragedy character), who has similar experience with Ophelia. Emperor Tang Ming gives her too much power, which puts her in danger and eventually leads to the tragedy of Lady Yang. To some extent, Lady Yang and Ophelia are the same sympathetic.

Moreover, the ending of Ophelia's story is particularly affiliated with Hamlet's problem of self-examination, revealing another affinity between Ophelia and Confucianism. First, though at first he confessed his love to her enthusiastically and even her father was almost moved in their relationship, Hamlet does not self-examine their relationship and his judgment towards Ophelia. Hamlet is blinded by his ambition or revenge, which indirectly results in her tragic death after he loses his mind towards the real world and the surroundings he lives. Moreover, Hamlet's attitude towards love is also influenced by the words of Ghost, who states, "That it went hand in hand even with the vow I made to her in marriage, and to decline upon a wretch whose natural gifts were poor To those of mine" (Act 1.5). Because of his mother's betraval, Hamlet then chooses to say to Ophelia that "(I) did love you once," but "it hath made (me) mad" (Act 3.1, Hamlet), and that he has partly thought that "for the power of beauty will sooner transform honesty from what it is to a bawd than the force of honesty can translate beauty into his likeness" (Act, 3.1, Hamlet). However, it is well-known that it is not the case. Dramatically, his concealed self-examination reappears in Ophelia's obsequies. He thinks that he "loved Ophelia; forty thousand brothers could not, with all their quantity of love, make up my sum" (Act 5.1). At that moment, self-examination can no longer change the fact that Ophelia commits suicide. Obviously, if he could keep self-examination in mind, Ophelia's ending would not be so miserable. Hamlet's self-examination not only affects himself but also those closest to him.

Conclusion

According to Bloom, Shakespeare's characters exemplify the invention of the human and the birth of the idea of personality as we now understand these concepts use these terms and concepts (4). In this sense, comparing such ideology in Confucianism and *Hamlet* does make sense. From a micro perspective, self-revision is closer to Hamlet's characteristics than self-fashioning. Moreover, through Hamlet's monologue, it can also be perceived that Hamlet is in a state of self-examination and equilibrium. Finally, the strength of self-examination indirectly affects the destiny of Ophelia which led to the tragedy of Ophelia and the death of many characters, and also the tragedy is meaning for in traditional Chinese drama. There are, however, certain problems with this line of interpretation. As a result of many complicated reasons such as culture and history, Confucianism and Shakespeare's drama cannot completely correspond to each other. The ideology that may exist in *Hamlet* can only be analyzed from a very micro-perspective. Nevertheless, in this approach, self-examination certainly can be regarded as a cross-culture value, which is also an important value in many different countries. Moreover, this cross-cultural ideological communication makes the characters richly more colorful and sophisticated, feeling Hamlet from a Chinese perspective.

Acknowledgements

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