BARCELONA

THE BARCELONA CONFERENCE ON ARTS, MEDIA & CULTURE

OFFICIAL CONFERENCE PROCEEDINGS

"To Open Minds, To Educate Intelligence, To Inform Decisions"

The International Academic Forum provides new perspectives to the thought-leaders and decision-makers of today and tomorrow by offering constructive environments for dialogue and interchange at the intersections of nation, culture, and discipline. Headquartered in Nagoya, Japan, and registered as a Non-Profit Organization (一般社団法人), IAFOR is an independent think tank committed to the deeper understanding of contemporary geo-political transformation, particularly in the Asia Pacific Region.

INTERNATIONAL

INTERCULTURAL

INTERDISCIPLINARY

iafor

The Executive Council of the International Advisory Board

The Barcelona Conference on Arts, Media & Culture 2021

Official Conference Proceedings

Table of Contents

A Qualitative Study on the Experiences of Chinese Empty Nest Couples on Their Role Change

Cheuk Yan Chu, The Chinese University of Hong Kong, Hong Kong

The Barcelona Conference on Arts, Media & Culture 2021
Official Conference Proceedings

Abstract

Purpose: In family life cycle theory, each developmental stage means a crucial transition to individual, marriage, and family. However, when discussing on the family life cycle, many empirical studies in Hong Kong only focus on the early stages related to raising children. Studies in the West reviewed that parents in empty nest stage experience identity crisis (i.e. loss of major parental role) and mixed emotions. Maladaptive to role adjustment may result in poorer psychological well-being or even empty nest syndrome. Mental health issue is no longer just an individual focused talk. Instead, we should also instill the aspects of family system and family developmental stages. This study aims to enrich the knowledge on empty nest couple's role change experiences in Chinese community. To provide new perspectives to our social service implementation and policy making. Methods: A qualitative case study approach was adopted. Six pairs of empty nest couples were recruited. Face-to-face, zoom and semi-structure interview were used. Both individual and couple interview were adopted depending on the interview location. Emotion cards were also applied during the interviews. Results: The interviewed empty nesters reported 'Gain' from more private and carefree moments. They also experience the process of 'Loss' and 'Restoration' towards the major parental role, which could be illustrated by the concept of 'Dual Process Model' from Stroebe & Schut (1999). Lastly, three protective factors (i.e., acceptances, marital companionship, and emotional bond with children) were found for empty nesters to restore their parental role loss. Conclusion: This study could provide preliminary information for the family life cycle studies in later stages in Chinese community. Some insights to the Chinese elderly services practices and policy making were discussed.

Keywords: Empty Nest Stage, Role Change Experiences, Protective Factors, Dual Process Model, Family Life Cycle, Elderly Services, Hong Kong

iafor

The International Academic Forum
www.iafor.org

Introduction

Hill and Rodgers (1964) suggested the family development perspective and proposed family life cycle which emphasizes the significance of expending awareness on the individual, marital and family development (Nichols & Pace-Nichols, 1993). Rollins & Feldman (1970) had modified and classified the family life cycle into eight stages. It is assumed that each stage as a crucial transition to family and individual development, and with its own marital and parental roles' developmental tasks (Hill and Rodgers, 1964; Nichols & Pace-Nichols, 1993). Stage (VII) 'Families in the Middle Years' (Empty nest stage) is seen as a huge transition and psychosocial changes to the couple, since they need to face individual, marital, and parent-child relationship adjustment (Kumar, 2015; Mitchell & Lovegreen, 2009; Nichols & Pace-Nichols, 1993).

According to Nichols & Pace-Nichols (1993), family life cycle theory believes that the family fulfillment is according to the level of integration with specific parental role changes. In empty nest stage, couple need to keep the marital closeness, to realign the family relationships, to support partner in experiencing the fear towards loss of parental roles and prepare for the grief of losing partners in future (Nichols & Pace-Nichols, 1993).

It is reported that numbers of the empty nesters would suffer from Empty Nest Syndrome (ENS). Many studies found that the core reason leading to ENS is the loss of major parental role. An overview of ENS study from Badiani & Sousa (2016) revealed that parents in empty nest stage face the identity crisis and need to have alternative roles to fulfill. The maladaptive role change experiences will lead to anxiety and depression which is labeled as ENS, and negatively affect parents' psychological well-being.

The empirical studies have provided significant proof on the importance of role change in empty nest stage. This study decides to focus and have further exploration on the empty nest couples' role change experiences.

Though not all the parents in empty nest stage experiences negative emotions or ENS, studies identified that they experience mixed emotions in this role adjustment process (Badiani & Sousa, 2016; Kumar, 2015). Some specific experiences in empty nest stages have also been mentioned in related studies, such as the worries on social and economic support, fears of being rejected by children, challenges on the marital satisfaction and together with career and physical challenges (Badiani & Sousa, 2016; Kumar, 2015; Nichols & Pace-Nichols, 1993).
The limitation on current studies is that the elaboration of emotion experiences in empty nest stages is fragmented and limited. This study is going to preliminarily explore the experiences of empty nest couple in the view of what they retell their stories with related emotion experiences.

Lastly, in Hong Kong context, our studies mostly discuss on the experiences of parenthood in the earlier family life stages in raising children. However, as searched in the research engine, there are rare Hong Kong research discuss on the parents' experiences in view of the later family life stages. Hong Kong is now facing an aging population problem. Together with the aging phenomenon, we can project that more empty nesters will appear in Hong Kong.

Though numerous of western studies have discussed on the empty nest issue, there are social and cultural differences to Hong Kong empty nest condition (Kumar, 2015; Mitchell & Lovegreen, 2009). This study would like to enrich the knowledge on Chinese empty nest couple's role change experiences and provide new perspectives to our social service

implementation on frontline social work practice and policy making.

Methodology

Research Design

This was an exploratory nature study. Qualitative case study approach was adopted to obtain primary and subjective information from the interviewees. Both face-to-face interviews and zoom-interviews had been used during the pandemic. Narrative and semi-structure interview approach were used. To facilitate the sharing of stories, emotion cards from Resculpt Centre For Personal & Relational Reconstruction (2016) were applied during the interviews.

Sampling and Participants

The sampling had been collected from different social network groups with a recruitment poster. Participants were recruited in purposive sampling. This study recruited six pairs of empty nest couples, whose children had departed from home for at least one year but not more than ten years.
Participants with confounding factors were excluded (i.e., Parents diagnosed with serious physical illness and mental illness; Children diagnosed with special needs). Each pair of participated couple had read and signed the consent form before starting the interview.

Procedures

Each individual interview was held approximately 75 minutes. Each couple interview was held approximately 150 minutes. All interviews had been audio-recorded and processed with interview guided questions. According to the interviewees' responses, probing questions had been asked.

Data Analysis

A grounded theory approach had been applied. All interviews were transcribed and processed to both inductive open coding and deductive theoretical coding. The links between patterns were further explored and conceptualized into main themes.

Interviewees' Demographic Data

	Couple 1 – P		Couple 2 - T		Couple 3 - F		Couple 4 - H		Couple 5 - I		Couple 6 - G	
	Husband PM	Wife PF	Husband TM	Wife TF	Husband FM	Wife FF	Husband HM	Wife HF	Husband IM	Wife IF	Husband GM	Wife GF
Age	62	60	61	59	71	64	58	60	65	57	70	67
Education level	Degree	High Dip	Secondary	Secondary	Master	Degree	Secondary	Secondary	Primary	Secondary	Master	Degree
Work status	Retired	Retired	Working	Working	Working	Housewife	Retired	Retired	Retired	Retired	Retired	Retired
FOO order	6th / 7	1st / 3 *1st DA	4th / 5	1st / 4 *1st DA	Only child	2nd / 3	6th /8	5th /5	3rd /4	5th / 5	2nd / 3	4th /5
No. of children	1 son (aged 25)		1 son (aged 34)		2 daughters (aged 32 & 26)		1 son (aged 34) 1 daughter (aged 29)		2 daughters (aged 30 & 27)		1 son (aged 37) *With 2 grandchildren (aged 7 &3)	
Empty Nest lengths	6 years		4 years		1.5 years		1.5 year		1 year		10 years	
Reasons of children departure	Overseas study		Married		1st daughter: Married 2nd daughter: Work overseas		1st son: married 2nd daughter: work overseas		Married		Married	
Lengths of couple's marriage	31years		36years		40years		36 years		35 years		44years	
Subjectively experienced difficulties during the Empty Nest stage?	✗	✓	✗	✗	✓	✓	✓	✓	✗	✓	✗	✗
Subjectively experienced Empty Nest syndrome?						✓				✓		

Figure 1: Interviewee's Demographic Data

As shown in Figure. 1, the age of recruited interviewees was between 57 - 71. Four interviewed couples had 1 - 4.5 years of empty nest experiences, while two interviewed couples had 6 and 10 years of empty nest experiences. The major reason for children's departure was got married, while the other reasons were study or work overseas. Within the participants, two of the parents subjectively reported to have empty nest syndrome.

Findings and Discussion

Finding 1: Experience the "Gain" On More Private and Carefree Moments

Figure 2. The Process of More Private Moments to Carefree Moments

Empty nesters commonly shared their 'Gain' experiences on the major parental role change. They have more private moments, thus become carefree (Figure. 2).

Case 1: Husband

*PM54: "**I did not have much private time in the past, but I have got more now**. I become **more relax**, since I do not need to concern about his daily cares. That's why **I feel more ease and relax**."*

Case 3: Wife

*FF48: "**Children do not need for my cares now. I have more private moments.**"*

*FF160: "Now **I don't need to be that tired**. **I am now feeling ease and relax.** I feel to have much **more freedom and without stress**."*

Relevant to the Role Stress Theory which believes that the effect of role changes is associated with the intensity of stress and conflicts from the role (Barnett and Baruch, 1985; White and Edwards, 1990). Similar with the sharing from interviewees, studies support that parental role is stressful and with role strain (Price, Bush & Price, 2017; Simon, 1992). The change of major parental role may bring positive effects on empty nest's psychological well-being (Barnett and Baruch, 1985; White and Edwards, 1990). According to the sharing from empty nesters, the carefree moments imply the feelings of ease, relax, free, autonomy and fun.

Finding 2: Experience the Process of "Loss" and "Restoration"

'Loss-oriented' and 'Restoration-oriented' are the concepts from Stroebe & Schut (1999) 'Dual Process Model', which is a bereavement theory. 'Loss-oriented' means to cope with the loss by focusing on the loss through some tasks; while 'Restoration-oriented' means to cope with the loss by rebuilding life positively. There are different ways to achieve life restoration (Stroebe & Schut, 1999). There is also a crucial concept of 'Oscillation', which is a healthy grieving by confronting the loss while avoiding the loss (Stroebe & Schut, 1999).

All interviewed empty nesters reported to experience the process of loss and restoration, which may include the experience of oscillation in between. Besides, there are some protective factors on restoring the role change experience.

2.1.1   Types of Loss

(A) Loss of Children's Daily Companionship

Case 5: Wife

*IF4: "**I was used to chat with my children during their traveling to school**, which brought us closeness. T**hey were used to live at home at night, but suddenly, they are no longer at home**. **Suddenly, no one accompany me to have breakfast**."*

(B) Loss of Self-worth

Case 5: Wife

*IF4: "When children were small, **our closeness is that 'they could not live without me'. I was their center,** and I felt **very satisfied. But they don't need me now**"*

(C) Sudden Loss: Unexpected Departure of Children

Case 3: Wife

*FF66: "I can't accept my younger daughter staying in USA. **I don't expect that she studied oversea and would stay there for work…** I really can't accept it…"*

Mitchell & Lovegreen (2009) suggested that it is the attachment matters for the loss of day-to-day companionship and self-worth, since empty nesters are experiencing the significant loss on social, emotional, and physical domains. Meanwhile, their study found that since every parent have their own expected social time schedule according to personal experiences, off time launches of children might result in the unexpected sudden loss (Mitchell & Lovegreen, 2009).

2.1.2   Reaction to Loss

(A) Experience Emotional Distress

Case 5: Wife

*IF 5: "Our home turns 'Silent'. I am with **emptiness and loneliness. Upset and lonely**."*

Badiani & Sousa (2016) supported that empty nesters may experience emotional distress. Emotional distress is also a loss-oriented domain. Allowing the negative feelings to present is a process of grief work.

(B) Continue the Past Daily Routine

Case 5: Wife

*IF 5: "**After their departure, I kept the habit of waking up at six-thirty and waiting for the making breakfast. But who am I making for?**"*

Studies explained that parent may continue keeping day-to-day duties, and it is a sign of loss of purpose after children's departure (Morin, 2021, Piper & Jackson, 2017). In the loss-oriented concept, keeping a daily routine may be an unconscious avoidance on restoring past parent-child relationship.

(C) Bargain with the Departed Children on the Unaccepted Sudden Loss

Case 3: Wife

*FF66: "**I begged her for returning to Hong Kong, but she refused**. She said, 'I don't want to return"*

Kübler-Ross & Kessler (2005) also suggested a concept of anticipatory grief. This concept could further explain that since the parent did not experience a good separation process with the child, she felt suddenly loss of her child and had difficulties to cope with the loss.

(D) Feel Inadequate on Their Parental Role When Reviewing the Past Parent-Child Relationship

Case 6: Husband

*GM20: "**I think I did not do well in time-management**. If I could spend more time to accompany my son to do what he like and enjoy, I should not be having a distanced relationship with him. **However, history could not be reversed**.*

Studies explain fathers are prone to have the feelings of inadequate and regret towards the past parent child relationship (Bouchard, 2014; Ruszkowska, 2009; Sheriff and Weatherall, 2009). In the loss-oriented concept, the feelings of inadequate is a normal grieved feeling.

2.2 The "Restoration"

2.2.1 In Self

(A) Enjoyment on Interests

Case 3: Wife

*FF65: "**I am with fun**! I spend the time on **reading stock market data and taking photos in parks**. I **enjoy photography a lot!**"*

Case 1: Husband

*PM47: "The biggest difference is that I have more time now. **I enjoy spending the time on doing exercises, hiking and planting. It's comfortable and relaxing**."*

(B) Enhancement on Knowledges and Skills

Case 5: Wife

*IF118: "Right now, I always **challenge myself**. I feel **very excited**. **I go hiking with harder levels. My initial personality has come back!**"*

Case 2: Husband

*TM58: "I can chase my dream from **reading books**. I feel like I have **gained more knowledges…. It's very happy, with learning and growth**."*

(C) Self-Nurturing

Case 5: Wife

*IF142: "I feel like **being nurtured**. On the part of daily diet, since I have more time now, I could nurture myself through **making Chinese Soup**."*

Case 6: Husband

*GM62: "My present life is **practicing handwriting and drawing**. It's a **mindful and focusing moment**."*

Present studies have not yet illustrated the contrate experiences of restoring self in the empty nest stage. However, studies had revealed the importance on 'role reconstruction of self' and 're-purposing of individual life' for the empty nesters to cope with the role transitionary (Curasi, Hogg & Maclaran, 2001; Mount & Moas, 2015). In the concept of 'restoration-oriented', focusing on self is the process of rebuilding life through attending changes and strengthen role of self.

2.2.2   In relationships

(A) Peer Relationship

Case 3: Wife

*FF65: "I will **hang out with my seniors and enjoy photography...** I will **make bouquets for my friends and relatives**… I have also **met lots of friends in a financial management course**. It's fun and happy!"*

Case 2: Husband

*TM58: "My friend introduces me to read books. **We will share and discuss about the knowledge from books. Very happy, with learning and growth**."*

Ruszkowska (2009) reported that friendship and peer support can help redevelop the self-image, which are important for empty nesters in this role change transition. In the concept of 'restoration-oriented', focusing on the peer relationship is a way to cope with the loss by attending life change and rebuilding new relationship.

(B) Marital Relationship

Couple 1 - Case 1

Case 1: Husband

*PM62: "Wife and I have **more time to spend and be with together**... Especially in spirituality. We will **explore common interests**. I found that **we became closer**."*

Case 1: Wife

*PF158: "**Companionship is.. No matter son is here or not, husband and I can company to each other**. I am **very being loved** by my husband."*

Couple 3 - Case 5

Case 5: Husband

*IM142: "We must have **companionship**. We both turn old. I wish to **accompany more to each other and chat more**."*

Case 5: Wife

*IF92: "Husband is an **essential companionship**. After the departure of two daughters, **I chat more with my husband**. We will have **couple time** to play table tennis and cycling. **Very enjoyable and happy**!"*

Erickson et al. (2010) revealed that couple have more spaces in focusing on the marital relationship after children's departure. The couple may have less work-family conflicts and with more balanced equity within the marital relationship (Erickson et al., 2010). Present studies supported that the departure of children is generally shown increase in marital quality and satisfaction (Bouchard, 2014; Erickson et al., 2010).

In the concept of 'restoration-oriented', the rebuild of marital relationship is a way to cope with the loss by attending life change and rebuilding new relationship.

This study found that there are some core relational elements that indicating the quality of marital relationship in the empty nest stage. As reflected by the empty nesters, those core elements are 'Companionship', 'Being loved and satisfied' and 'Closeness'. This finding can concretize the subjective experiences of the improved marital relationship and contribute to coming related studies.

(C) Parent-Child Relationship

Case 3: Wife

*FF78: "**In the past, we had many conflicts** with my daughter. Now, I **feel very ease since she is understanding us more after the departure. We chat a lot after she got married**. She once said to me, 'I found that I just reconciliated with you two.'*

Case 5: Husband

*IM140: "Our family is with **more harmony** now. After their growth and departure, we have **less stress and less tensions.**"*

Ward & Spitze (2007) found that there are little effects on the quality of parent-child relationship. Meanwhile, some studies found that father becomes less authoritarian in the new parent-child relationship, and children become more receptive to father's advice (Bozett, 1985; Ruszkowska, 2009).

This study provides new perspective to present studies in the aspect of parent-child relationship. Both father and mother reported to have improved relationship with children. Parents restored the new parent-child relationship in a harmonic perspective.

(D) Patient-Carer Relationship

Case 1: Husband

*PM94: "**Since my son is not here now, I can focus on taking care of my family members with illness. I can have more contribution and influences in the family**…All their physical illness makes you **worried**.*
"

Case 6: Wife

*GF10: "**Right after my son's married, my elder sister** developed weak immune system. Also, diagnosed to have **lung cancer**. After retired, **I go to England two to three times a year and take care of her**. **I worried** about her health condition…"*

This study found that the departure of children can be a triggering event for empty nesters to spend their spare time on taking care of other family members with physical illness.

Focusing on the patient-carer relationship can be a way to cope with role change through attending to new life and build new relationship. Besides, the carer experiences triggered them to have preparation on aging:

Case 2: Husband & Wife

*TM83: "**I have thought about the topic of 'aging'. Most of the men, after the leave of wife, must be suffered.** Since wife take care most of the thing."*

*TF83: "Yes, that's why I have to **write down all the important things.**"*

According to Nichols & Pace-Nichols (1993), since empty nesters are entering to the later years in respect to the family life cycle, they need to have a balance between life satisfaction and the forthcoming losses. Empty nesters may also share a deeper marital communication on preparing for the loss of living without spouse (Nichols & Pace-Nichols, 1993).

2.2.3   In Life

Case 1: Wife
*PF157: "In the past I have more worries towards my son, but now he has grown up as an individual. I have individual growth too. Every life stage has its own tasks, **life is with purpose. I would like to use my learnt singing technique to serve God and church.**"*

Case 5: Wife

*IF117: "**I commit more on the environmentally friendly issues**. I feel like I am **with contribution**. Besides, if my neighbors feel sick, I will ask them if I could **offer help** or not. I believe that I am **valuable**."*

Similarly, Mount & Moas (2015) shared their 'Re-purposing' counseling interventions on empty nesters cases. They concluded that sometimes empty nesters are hindered by the major 'parent' narrative while neglecting the 'self' narrative, which brings them emotional distress (Mount & Moas, 2015). They suggested that through reauthoring the meaning of life and focus on self needs could help empty nesters to have better adjustment on role change (Mount & Moas, 2015).

To conclusion, this study found that the restoration mechanism of empty nesters can be in various levels of interpersonal relationships (i.e., in self, in relationships with others and in life). All relational domains are restoring tasks in attending changes and building new roles when coping with the loss in major parental role. Besides, as supported by the theory of 'Various level of Health Management and Social Care' , it is a natural process for human to maintain good psychosocial well-being by keeping various interpersonal relationship (Education Bureau, 2019).

2.3 Experience the "Oscillation" between Loss and Restoration

Seidel, Yorgason, Polenick, Zarit & Fingerman (2018) explained that empty nesters keeping a certain part of child-rearing role is preliminarily with the emotions of worries and anxiety. While Juduo (2021) explained that Chinese parents are affected by the Chinese traditional belief and believed that it was a responsibility for parents to take care of children for the whole lifespan.

In Structural Family Therapy, there is a concept of 'setting boundary', which can help explain the 'Oscillation' reaction. Minuchin, Nichols & Lee (2007) proposed that a clear boundary can provide spaces for adaptive communication and exchange emotions in a safety basis; a rigid boundary occur when family with disengaged relationships which hinders the clear communication and emotional expressions in family; a diffused boundary occur when the family relationships are enmeshed which hinders clear communication and family members are dependent on the emotional expressions of each other.

When empty nesters oscillating between 'Loss' and 'Restoration', they are in a progress to set boundary with their departed children in the parent-child subsystem. Sometimes they are in diffused boundary when they remain certain parts of child-rearing role. Their relationship is enmeshed and with difficulties in adjusting emotional expression. They also experience a rigid boundary when remaining certain parts of the parent-child relationship. They do not want to change the encountering patterns. Meanwhile, they respect children's maturity, rebuild the new

relationship with departed children and attending to new family condition, which is attending to a clearer boundary.

2.4 Protective Factors for Restoring the Role Change Experiences

2.4.1   Acceptance

Case 5: Wife

*IF7: **"I notice that I have to accept the fact** that 'My children no longer need me'. Overall, **it is a happy step down because they become independent."***

Case 1: Husband

*PM107: "**I have completed my responsibility. I wish he could now how to survive in the way he wants.** Son should have his own pathway."*

According to Kübler-Ross & Kessler (2005), the last stage of grief is acceptance. Kübler-Ross & Kessler (2005) believed that acceptance is a process of experiences, which contains a more stable emotional status to continue adjustments. With acceptance, empty nesters are easier on attending new changes, and with stable energy in experiencing the oscillation process.

2.4.2   Marital Companionship

Case 5: Wife

*IF91: "after the departure of two daughters, I chat more with him. He helps me a lot, **he is the one authentically being with me**."*

Badiani & Sousa (2016) pointed out that the intimacy in marital relationship is a protective factor for empty nesters to face the emotional distress. The intimate marital relationship reinforces higher self-esteem and provide energy to explore other meaning of life (Badiani & Sousa, 2016). This study found that the companionship within the marital relationship could provide energy and accompany empty nesters to walk through the process of role adjustment.

2.4.3   Emotional Bond with Children

Case 3: Wife

*FF68: "I am in **a progress to adjustment...**Elder daughter **accompanies us to go traveling**. Last year we have been to Thailand!"*

Case 5: Wife

*IF16: **Elder daughter is caring. She came back home three times a week.** She will also invite me to join their exercises in often'.*

Badiani & Sousa (2016) revealed that the emotional bond of parent-child relationship could help the empty nesters to reduce the intensity of suffering from emotional distress and empty nest syndrome. This study found that the emotional bond of parent-child relationship can be

presented in the accompaniment of children, the initiative cares from children and the re-contracting of meeting schedule with children. To keep emotional bond with children could stabilize parents' emotions and reinforce the mechanism of attending life restoration.

Experience the process of 'Loss' and 'Restoration'
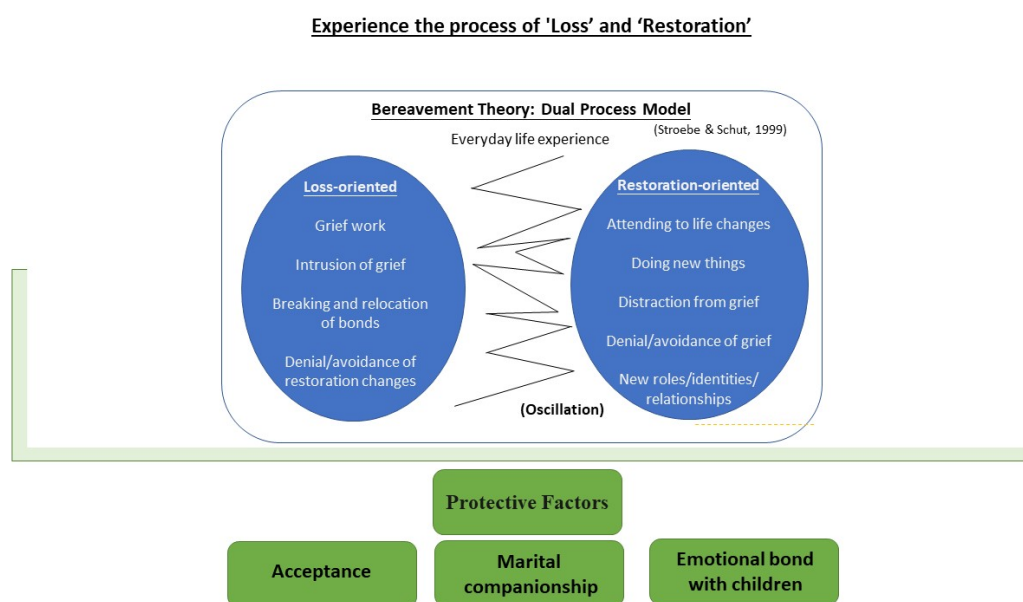
Figure 3. Experience the Process of 'Loss' and 'Restoration'

To conclude, the protective factors act as a supporter of the empty nester's role adjustment (as shown in Figure. 3). Those factors can contain the emotional distress derived from loss-oriented grief; provide energy for empty nesters to restore life in attending new changes; and support the adjustment during oscillation.

Conclusion

It is a paradox for empty nesters to experience both 'Gain' and 'Loss' in role change. They gain from the carefree moments while facing the grief of major parental role loss. Although they may swing between the loss and restoration in life, they are in a progress to move on and searching for the new boundary on parent-child relationship and their new meaning of life. Furthermore, there are some protective factors facilitating them to adapt the role transition. Overall, Empty Nest Stage can be a stage to restore and sublimate the post parental life.

Social Implication

Counselor may assist the empty nesters to review their situation with the perspectives of 'loss-oriented', 'restoration-oriented' and 'oscillation', which can help develop acceptances to self and others and facilitate possible changes. Meanwhile, counselor can facilitate patient to ventilate the related emotional distress towards the loss. Facilitate patient to attend new changes through expectation management on the new parent-child relationship and re-purposing life.

Besides. this study found three protective factors that may reinforce the restoration mechanism in the role change adjustment process (i.e., Acceptance, Marital Companionship and Emotional Bond with Children). Elderly Centre can strengthen the protective factors in the direct services for empty nesters. For instances, to promote the sense of acceptance through mindfulness activities, life review programs and educational talks; to strengthen the marital relationship

through creating couple programs and facilitate their experiences on marital companionship; and to provide community education in arising social awareness towards the needs of emotional bond with children. We may also use of social media to promote the ideas of protective factors in the elderly's online platforms.

The core restoration experience of empty nesters are the expansion of various levels of relationships (i.e., in self, in relationships with others and in life). Elderly Centre can assist empty nester in the restoration process. For instance, to hold programs related to self-exploration, marital relationship building, peer support groups and education on the intergenerational support issue. We may also promote the concept of successful aging in community, which encourage elders to live purposively, keep certain of social relationships and equip with more energy to encounter with changes during aging.

Finally, empty nesters may shift part of roles to the carer of family members with physical illnesses. We may promote a carer-friendly environment in community. Enhance the carer support networks and the elderly long term care services to lessen caring burden. We may also provide education on preparing forthcoming loss. For instance, we may have education on the topics of loss of health, loss of spouse and advanced care planning.

Acknowledgements

References

Badiani, F., & Sousa, D. A. (2016). The Empty Nest Syndrome: critical clinical considerations. *Indian Journal of Mental Health, 3*(2).

Barnett, R. C., & Baruch, G. K. (1985). Women's Involvement in Multiple Roles and Psychological Distress. *Journal of Personality and Social Psychology, 49*(1), 135-145.

Bouchard, G. (2014). How do parents react when their children leave home? An integrative review. *Journal of Adult Development*, *21*(2), 69-79.

Bozett, F. W. (1985). Male development and fathering throughout the life cycle. *American Behavioral Scientist, 29*, 41–54.

Curasi, C. F., Hogg, M. K., & Maclaran, P. (2001). Entering the Empty Nest Stage: a Multi-Method Exploration of Women= S Life Experiences and Coping Strategies in Periods of Life Stage Transition. *European Advances in Consumer Research,5,*260-267.

Education Bureau (2019). *Health Management and Social Care: Ch.5 Social Well-being*. Retrieved from: https://www.edb.gov.hk/attachment/en/curriculum-development/kla/technology-edu/resources/hmsc/HMSC_Booklet5_E_p48.pdf

Erickson, J. J., Martinengo, G., & Hill, E. J. (2010). *Putting work and family experiences in context: Differences by family life stage*. Human Relations, 63, 955–979.

Hill, R., & Rodgers, R.H. (1964). The developmental approach. Pp. 171-211 in Harold T. Christensen (ed.). *Handbook of Marriage and the Family*. Chicago: Rand McNally

Juduo (2021). *How to understand: "To raise a child till he reaches age one hundred, a parent would worry about him for ninety-nine years" (俗語"養兒一百歲常憂九十九"，如何理解這句話？)*. Retrieved from: https://www.juduo.cc/club/1210173.html

Kumar, P. S. (2015). Psychological well being and marital adjustment: a study on elderly couples in post parental stage of life. *Indian Journal of Gerontology*, *29*(1), 77-90.

Kübler-Ross, E., & Kessler, D. (2005). *On grief and grieving: Finding the meaning of grief through the five stages of loss*. London; New York: Simon & Schuster.

Minuchin, S., Nichols, M. P., & Lee, W. Y. (2007). *Assessing families and couples: From symptom to system*. Boston, MA: Allyn and Bacon.

Mitchell, B. A., & Lovegreen, L. D. (2009). The empty nest syndrome in midlife families: A multimethod exploration of parental gender differences and cultural dynamics. *Journal of family issues*, *30*(12), 1651-1670.

Morin, A (2021). *5 Signs and Symptoms of Empty Nest Syndrome*. Retrieved from: https://www.verywellfamily.com/signs-of-empty-nest-syndrome-4163787

Mount, S. D., & Moas, S. (2015). Re-Purposing the "Empty Nest". *Journal of Family Psychotherapy, 26*(3), 247-252.

Nichols, W. C., & Pace-Nichols, M. A. (1993). Developmental perspectives and family therapy: The marital life cycle. *Contemporary family therapy*, *15*(4), 299-315.

Piper, A., & Jackson, I. (2017). She's leaving home: a large sample investigation of the empty nest syndrome. *The German Socio-Economic Panel Study, Issue 910*.

Price, C. A., Bush K.R., & Price, Price S.J. (2017). *Families & change: Coping with stressful events and transitions* (5th ed.). Los Angeles: SAGE.

Resculpt Centre For Personal & Relational Reconstruction (2016). "Explore the Implicit" Feelings and Needs Cards.

Rollins, B. C., & Feldman, H. (1970). Marital satisfaction over the family life cycle. *Journal of Marriage and the Family*, 20-28.

Ruszkowska, J. T. (2009). *Constructions of fatherhood during the 'transition to the empty nest' stage of parenting (Doctoral dissertation)*. Nottingham Trent University.

Seidel, A. J., Yorgason, J. B., Polenick, C. A., Zarit, S. H., & Fingerman, K. L. (2018). Are you sleeping? Dyadic associations of support, stress, and worries regarding adult children on sleep. *The Gerontologist*, *58*(2), 341-352.

Sheriff, M., & Weatherall, A. (2009). A feminist discourse analysis of popular-press accounts of postmaternity. *Feminist and Psychology, 19*, 89–108.

Simon, R. W. (1992). Parental Role Strains, Salience of Parental Identity and Gender Differences in Psychological Distress. *Journal of Health and Social Behavior, 33*(1), 25-35.

Stroebe M. & Schut, H. (1999). The dual process model of coping with bereavement: Rationale and description. *Death studies*, *23*(3), 197-224.

Ward, R. A., & Spitze, G. D. (2007). Nestleaving and coresidence by young adult children: The role of family relations. *Research on Aging*, 29, 257–277.

White, L., & Edwards, J. N. (1990). Emptying the nest and parental well-being: An analysis of national panel data. *American sociological review*, 235-242.

Cultural Identity and Home in Randa Jarrar's a Map of Home

Ichraq Chadli, University of Valladolid, Spain

The Barcelona Conference on Arts, Media & Culture 2021
Official Conference Proceedings

Abstract

As an estranged Egyptian, Palestinian, and Kuwaiti, Randa Jarrar had a tough upbringing. In her novel, the protagonist 'Nidali' somewhat reflects her life. Nidali was smart for her age, rebellious, studious, and curious and like any other kid, she longed for a place she can call home forever. Yet, that was complicated due to the recurrent move and the not-so normal life. Like Randa Jarrar, Nidali struggled to keep her cultural identity intact. This paper applies a qualitative data analysis based on textual analysis where it explores Nidali's sense of difference and rigidity between her cultures and sense of self and constantly being torn apart between her Americaness and Arabness. Is she Arab or American? Is she neither or both? This difference will be examined through Homi Bhabha's concept of "unhomeliness" in which he believes that the first feeling a newcomer gets when encountering a new culture is the sense of "unhomeliness". The latter is generated through the change of places and the fact that home or part of it is missing, and this is how Nidali felt when she started having nightmares in the middle of the night. Moreover, Nidali's experience will be further explored through Edward Relph's "Place and Placelessness" in which he questions the 'taken-for-granted nature' of place and its significance as an unavoidable dimension of human life and experience. Additionally, the complexity of Nidali's migration experience will be manifested from her identity construction through Erik Erikson's "identity crisis".

Keywords: Cultural Identity, Home, Post Colonialism, Migration, Arab American Identity

iafor

The International Academic Forum
www.iafor.org

Introduction

> Baba said that moving was part of being Palestinian. "Our people carry the homeland in their souls," he would tell me at night as he tucked me in. This was my bedtime story when I was three, four. "You can go wherever you want, but you'll always have it in your heart." I'd think to myself: "That's such a heavy thing to carry."
>
> Randa Jarrar, *A Map of Home*

As an estranged Egyptian, Palestinian, and Kuwaiti, Randa Jarrar had a tough upbringing. In her novel, the protagonist 'Nidali' somewhat reflects her life. Nidali was smart for her age, rebellious, studious, and curious and like any other kid, she longed for a place she can call home forever. Yet, that was complicated due to the recurrent move and the not-so normal life. Like Randa Jarrar, Nidali struggled to keep her cultural identity intact because of the long history of colonization and present postcolonial experiences and migration. The latter has tremendously affected the construction of identity and triggered urban and social marginality, which in turn put identity into question and made it more peculiar in terms of its contemporaneity, and being invaded by the outsider, "the other". This otherness within is widely represented through the concept and theory of "hybridity". Hybridity, mestizaje, creolization, and syncretism are terms that have been proposed to refer to processes of cultural and social mixing in postcolonial situations. Furthermore, coming from hybrid cultures and having a hybrid identity, one can doubt their sense of self and feel like they do not belong *neither here nor there*. This paper applies a qualitative data analysis based on textual analysis where it explores Nidali's sense of difference and rigidity between her cultures and sense of self and constantly being torn apart between her Americaness and Arabness. Is she Arab or American? Is she neither or both? This difference will be examined through Homi Bhabha's concept of "unhomeliness" in which he believes that the first feeling a newcomer gets when encountering a new culture is the sense of "unhomeliness". The latter is generated through the change of places and the fact that home or part of it is missing, and this is how Nidali felt when she started having nightmares in the middle of the night. Moreover, Nidali's experience will be further explored through Edward Relph's "Place and Placelessness" in which he questions the 'taken-for-granted nature' of place and its significance as an unavoidable dimension of human life and experience. Additionally, the complexity of Nidali's migration experience will be manifested from her identity construction through Erik Erikson's "identity crisis".

Analysis

Coming from a hybrid culture that was produced by colonization, Nidali's contemporary identity was invaded by the outsider, by the "other". Additionally, she experienced a sense of difference and rigidity between her cultures, but at the same time, gained a new form of hybrid identity. In this regard, Homi K. Bhabha postulates that all culture is characterized by a certain "mixedness" where it merges two worlds into a created political, economic, social and cultural world, which, in turn, co-produces hybrid political orders and allows the international and local worlds to co-exist. Moving from place to place, being banned from entering Palestine, running away from war in Kuwait, and having to start from scratch every time she moves undeniably rendered her confused, distant and caught in between:

> I sat in the balcony, completely bewildered, after she told me the news."I can't move to America", I said. Mama looked at me, waiting for a reason. "I have nothing to wear. And my hair is stupid!" I didn't want to tell her the truth: that I didn't want to

move again, to work at feeling at home again, to lose that home again, then have to start all over again. (207)

Growing up, Nidali learnt about her name change or alteration, and she was not very pleased. Her father Waheed had hoped for a boy since he had six sisters and lost three brothers. Therefore, at first, the given name was "Nidal" (struggle) then modified to "Nidali" (My stuggle) which made sense since she had almost died at birth "I had almost died, survived, almost died again, and now I was going to live" (3). This sentence in itself is a manifestation of the contested identities of Palestinians who may or may not survive. And if they do survive, their history will be inextricably intertwined with their present and future life. Nonetheless, Bhabha contends that this 'in-between' space carries the burden and meaning of culture, and that is the essence of hybridity. The latter also emphasizes the reciprocity of cultures in the colonial and post-colonial process in expressions of 'syncreticity, cultural synergy, and transculturation':

> It is significant that the productive capacities of this Third Space have a colonial or postcolonial provenance. For a willingness to descend into that alien territory may open the way to conceptualizing an international culture, based not on the exoticism of multiculturation or the diversity of cultures, but on the inscription and articulation of culture's hybridity. (The Location of Culture, 1994)

In *The Location of Culture*, having recourse to Bhabha's ideas, culture is not a static entity and certainly not an essence that can be fixed in time and space. But rather, culture is fluid and perpetually in motion. It is a melting pot of several diverse elements, which are frequently added and regularly transforming cultural identities. For him, for instance, there is no pure Indianness, Africanness, or Britishness, in this case, no pure Arabness and Americaness that can be grasped, studied, or even returned to. Therefore, this idea of pure uncontaminated culture is somewhat non-existent or a myth. Following this idea, Bhabha believes that the first feeling a newcomer gets when encountering a new culture is the sense of "unhomeliness". This sense of "unhomeliness" is generated through the change of places and the fact that home or part of it is missing, and this is how Nidali felt when she started having dreams in the middle of the night. She didn't know whether she's in Alexandria (Egypt), Kuwait or in Texas. She would wake up to birds chirping and wonder if that was the calm before the storm. But then she would keep reminding herself that she's in America, and that it's the one that attacks people and never gets attacked, she felt safe but guilty for being in a place that does that (218). Additionally, she was very confused and had many questions that it made her miss "a hundred different things from home, and she thought that she was starting to forget what they were and where home really was" (221).

Place and Placelessness (1976) by Canadian geographer Edward Relph, a notorious book that still has an impact today both inside and outside geography in which Relph questions the 'taken-for-granted nature' of place and its significance as an unavoidable dimension of human life and experience. He attests that space is not bare or an isometric plane or a kind of container that holds places. But rather, he argues that in order to study the relationship of space to a more experience-based understanding of place, space has to be examined in terms of how people experience it. Even though he believes that there are endless types and potencies of spatial experience, he outlines a 'heuristic' technique rooted in "a continuum that has direct experience at extreme and abstract thought at the other…" (9). The idea of tackling space through people´s intimate experiences is crucial for the analysis in addition to identifying the modes of spatial experience that he terms 'instinctive, bodily, and immediate,

such as pragmatic space, perceptual space, and existential space'. And other modes that are 'more cerebral, ideal, and intangible, such as planning space, cognitive space, and abstract space'. For instance, existential space— the taken-for-granted environmental and spatial constitution of Nidali's everyday life is constructed through culture and social structure— can be experienced in a highly self-conscious way, for example, when she would feel overwhelmed by the beauty of something and in unself-conscious way where she would just sit there and do the same thing every day without paying attention to her surroundings, such as staying in the library for hours.

Many geographers explored space and place separately or stated their conceptual and existential relation. However, for Relph, 'the unique quality of place is its power to order and to focus human intentions, experiences, and actions spatially'. To further understand the notion of place, one needs to grasp these two modes: Insideness and Outsideness. For Relph, on one hand, being inside a place and being profoundly attached to it makes a person feel safe, unthreatened and his or her identity somewhat gets stronger with that place. On the other hand, being outside a place or alienated from place makes a person feel some sort of separation between themselves and the world. In this regard, Nidali felt both out of place and inside a place depending on the different homes or places she moved to:

> I knew from the beginning that home meant fighting, arguing, and embellishing, and that's why I loved school. School was where my parents were not. Teachers were there; they taught us facts based on reality. They weren't supposed to love us, and they didn't. They were English and cold and didn't resemble us at all. I liked this, that they did not hold a mirror up to me. Like some kids felt about play, school was my true escape. (10)

School was Nidali's home, where she felt safe, less pressured, less attached to her environment and somewhat free. Moreover, she loved poetry more than anything else, but her father wanted her to make his dreams come true, like getting a PhD, being a "renowned" scholar. He saw himself in her, but all she wanted to do was write poetry: "I hated how he created this folklore around himself so that I could never hate him, because the folklore constantly reminded me of how history fucked him (messed him up) and how he just couldn't do a PhD. He couldn't afford to" (240).

Nidali's parents played a huge part in her life. Her mother Ruza was Egyptian, and her father Waheed was Palestinian who was torn apart between who he was and where he belonged. He was forbidden from re-entering Palestine after the 1967 war, and automatically Nidali was prevented from entering Palestine too. Her father never felt like he belonged with his family which made Nidali's life a projection of his own or so he thought. Nidali was similar to her father in some ways, but slightly different in others. She was more eccentric, always seeking knowledge, and doing things her way even if it meant defying her father's rules. And being in America helped her with that. She even learnt about the law and how things were done in order to get away from her strict father and "teach him a lesson" because that's what the cops do. She says: "Cops in America don't like Arabs and they definitely don't like Arabs who hit their daughters and chase them around the house with knives" (249). With that in mind, Nidali's national identity is being constructed and one of the factors is migration since it has become "a force that is both formative and transformative" (Reyes, 110). Yet, the recurrent moves were not voluntary, but rather forced. Therefore, the forced migrants have little to no control over the course of their lives and are uncertain whether they would be accepted anywhere. As historian W. R. Smyser states in his book *Refugees: Extended Exile*: "unsure

whether any country would accept them…powerless to control their future, afraid to return home" (XIV).

Albeit Nidali's future was uncertain, she tried to make a life for herself out of the disparities that conditioned her way of living. However, the emotional conflicts and the countless tough events that were part of the migration experience certainly left their mark:

> How many times had they done this? An old feeling visited my heart, the feeling that I was a dupe. It made me wonder what else I was being deceived about. Did Mama and Baba really love me? Was I safe in the world? Who protected me? And from there, things got worse: Was the world real? Was God real? Was I real? (43)

Being left alone with her brother at home along with the family history frightened her and triggered these questions. In this regard, the interrelation between identity and migration has been expanding since the 1950s when the notorious American-German psychologist Erik Erikson came up with the term "identity crisis". As a migrant himself who left from Europe to the United States, Erikson manifested the complexity of the migration experience from identity construction. In his essay "Autobiographic Notes on the Identity Crisis", Erikson highlights the often disregarded unconscious complexities of identity crisis:

> The crisis is sometimes hardly noticeable and sometimes very much so: in some young people, in some classes, at some periods in history, the identity crisis will be noiseless; in other people, classes, and periods, the crisis will be clearly marked off as a critical period, a kind of "second birth," institutionalized by ceremonial procedure, or intensified by collective strife or individual conflict. (732)

In Nidali's case, the crisis is quite apparent insomuchas it will result in a kind of "second birth". The long family history of war and turmoil together with the stereotypical depiction of Arabs and her American identity that she has yet to discover precede her, exceed her expectations and examine her sense of self. It's worth mentioning that Nidali's birthday coincided the war, and her period came while they were running away in a village in the West called "al-Rahhaliya" which meant "the travelers", but the contrast here is that travelers choose to travel and are not forced to run away. (148)

Another unconscious complexity that Erikson mentions is having a "negative identity" that stems from identity formation: "The negative identity is the sum of all those identifications and identity fragments which the individual had to submerge in himself as undesirable or irreconcilable or by which atypical individuals and marked minorities are made to feel 'different'" (733). That is to say, the residue or negative leftovers of identity formation might be contained in a positive identity. For instance, when Nidali and her family took advantage of the "disaster" and depended on it to reach their destination:

> I drank my coffee in silence and wished mama could read the cup when I was done. I wished she could see a play in it, or a new home, or some sign that I'd make it to the damn exam, or that we'd make it as a family…We followed the ambulance all the way downtown, tailed it leaving only a few hand-lengths between us, the whole time clutching onto our seats for dear life, my family and I, not only following disaster, but chasing it, thankful for it, depending on it to get us where we need to get on time. And it did. (196-197)

Additionally, Erikson claims that identity conflict occurs due to the hidden "panic" permeating a historical period. As a psychologist who dealt with psychoanalysis and the stages of psychosocial development, from infancy to adulthood, he contends that "some periods in history become identity vacua caused by three basic forms of human apprehension: *fears* aroused by new facts, such as discoveries and inventions (including weapons), which radically expand and change the whole world-image; *anxieties* aroused by symbolic dangers vaguely perceived as a consequence of the decay of existing ideologies; and the *dread* of an existential abyss devoid of spiritual meaning." (733) For example, in the novel, Nidali's growing fears and anxieties of having a future that is influenced by her family history, of starting all over again in a foreign country, and of the cultural and religious clash between her Arabness and Americaness.

> I thought of my ancestors going from country to country, and a little silent film played in my head… My father gets on a ship from Jordan to Egypt and finds my mother and they marry. They get on a plane and go to America and beget me. We all get on a plane and go to Kuwait. My child someday will tell this entire story and tack on in the end that I got in a car and fled Kuwait and then boarded a plane to Egypt. I didn't know where my story would end or how many planes, carriages, cars, or ships my offspring and the offspring they beget would go on, only that I hoped in the future travel would be more comfortable, because right then I was sad and dizzy and my goddamned head hurt. (159-160)

Conclusion

To conclude, descending from a history of colonialism and European imperialism, and immersed in a present permeated by Western globalization, both Nidali and her father struggle to preserve their sense of self and home both culturally and spatially. Upon exploring the issues of space and place in "Beyond Culture: Space, Identity, and the Politics of difference", Akhil Gupta and James Ferguson claim that geographical territories that cultures and societies are thought to connect are not necessarily nations. They go on to say that "ethnographic maps" are an example that is believed to showcase the spatial distribution of "peoples, tribes, and cultures". However, "space itself becomes a kind of neutral grid on which cultural difference, historical memory, and societal organization are inscribed. It is in this way that space functions as a central organizing principle in the social sciences at the same time that it disappears from analytical purview". (7) One of the problems that affects one's identity and place is postcoloniality, which puts into question the hybrid cultures and the possibility of creating a "new culture" in both the colonized and the colonizing country. Going back to the novel, Nidali's curiosity about the "map" of Palestine made her father feel emotional and reminded of the ongoing battle between Palestine and Israel. After all, Palestine was once his home and later got lost amidst the never-ending cycle of political conflicts:

> One afternoon I sat at the dining table and drew a map of Palestine from memory. Baba walked by, coffee cup in hand, and said, "You still remember that?"… I pointed at the western border and asked, "Is that right?" "Who knows." He said, waving his hand dismissively… "What do you mean, Baba, when you say 'who knows'?" Oh, *habibti*. That map is from a certain year. The maps that came earlier looked different. And the ones that come after, even more different. "I mean… there is no telling. There is no telling where home starts and where it ends"… When I got up to go back inside, I noticed that Baba's eyes were filled with tears. (192-193)

References

Bhabha, Homi k., 1994. *The Location of Culture*. London; New York: Routledge.

Erikson, Erik, 1970. "Autobiographic Notes on the Identity Crisis". Vol. 99, No. 4, The Making of Modern Science: Biographical Studies pp. 730-759: The MIT Press.

Ferguson, J. Gupta, A, 1992. "Beyond Culture: Space, Identity, and the Politics of difference". Vol. 1, issue 1. Cultural Anthropology pp. 6-23.

Jarrar, Randa, 2008. *A Map of Home*. London: Penguin Books.

Relph, Edward, 1976. *Place and Placelessness*. London: Pion.S

W.R., Smyser. 1987. *Refugees: Extended Exile*. New York: Praeger.

A Corpus-based Study of Sexist Language in the Hashtag #everydaysexism on Twitter

Wanwen Wang, Hong Kong Metropolitan University, Hong Kong

The Barcelona Conference on Arts, Media & Culture 2021
Official Conference Proceedings

Abstract

This paper examines the Twitter hashtag #everydaysexism as the discourse of sexist language about the digital feminist movement, focusing on the fourth wave of feminism. Twitter users use #everydaysexism to "shouting back" and expose their experiences relating to sexism in daily life. The corpora consist of 1118 tweets in the hashtag #everydaysexism that include all the English tweets posted within 12 months (from April 1, 2020, until March 31, 2021). After conducting Melville et al.'s (2019) thematic model and drawing on Mills' (2008) sexist language framework, the workplace and customer service domains were found to have an overwhelming share, with 24.14% being overt and 75.86% indirect sexism. Even though overt sexism is not the primary sexist form in this domain, but it is still relatively apparent in its quantity, especially in first names, surnames, titles and generic pronouns, nouns. This study concludes by analyzing the different sexist language markers to reflect some issues regarding gender differences and to signal people to think about their behaviour and speech.

Keywords: Sexist Language, Hashtag Feminism, #Everydaysexism, Overt Sexism, Indirect Sexism

iafor

The International Academic Forum
www.iafor.org

Introduction

Sexist language is the bias against women in language structures and in its use (Weatherall, 2016). The sexism in language has been debated within feminist circles since the 1960s (Mills, 2008). Over the past six decades, women have increased awareness of gender equality. In recent years, thousands of women have been using online media platforms to discuss, promote, and activate gender equality and social justice (Femfuture, 2021). Micro-blogging websites, especially Twitter, are increasingly becoming forums for public debate and articulation of feminist protest (Ricarda & Elke, 2016). Hashtags (i.e. a hash mark # followed by a thematic word or phrase) can make Twitter searchable and find a digital home for discussion (Drüeke & Zobl, 2006). This study aims to provide some insight into the sexist language features around the hashtag #everydaysexism to reflect some issues regarding gender differences and to signal people to think about their behaviour and speech. Firstly, I shall review the current literature and the background of this study's object. Next, I shall introduce a detailed description of the methodological overview. Finally, I will explain the results via data sampling and elaboration.

Literature Review

Hashtag Feminism and the Everyday Sexism Project

Over recent years, hashtag feminism has become a central part of the feminist media repertoire; digital spaces also define fourth-wave feminist practices and allow for global engagement (Clark-Parsons, 2021; Guillard, 2016; Turley & Fisher, 2018). In recent years a growing number of scholars (e.g. Antunovic, 2019; Brantner et al., 2020; Golbeck et al., 2017; Horeck, 2014) have turned their attention to feminism in social media. Many hashtags (e.g. #YesAllWomen, #SolidarityIsForWhiteWomen, #heforshe, #FemFuture, #TwitterFeminism, #Everydaysexism) provide a visible platform for feminists to "shout back" to expose the experiences relating to sexism while sharing and reacting to it and provoking responses (Turley & Fisher, 2018). #everydaysexism is a hot hashtag initiated by the *Everyday Sexism Project* to inspire women not to be passive recipients of sexism. Thus, this research project investigates everyday dominant discourses of sexism under this hashtag. While the database contains multiple stories and experiences posted by disparate Twitter users (known as collective storytelling), naturally, there is a mix of sexist practices related to various topics. Some researchers have attempted to categorise the themes under this hashtag, notably Melville, Eccles and Yasseri (2019), who derived two topic modelling. Here, I will build on their (2019) findings to further explore which domains and what forms sexism is mainly present in present-day society. Last but not least, although the hashtag #everydaysexism provides millions of tweets for readers, for the time being, it remains under research and deserves more attention, especially from a discourse-analytical perspective.

Overt and Indirect Sexism

Feminist linguist Sara Mills (2008) has a creative look at the sexist language; she creates a sexist language framework on overt and indirect criticism. In her (2008) book, Language and Sexism, she stresses "overt sexism is more difficult to articulate these days", more indirect sexism has developed "which manages to express sexism whilst at the same time denying responsibility for it" (p.12). However, Bates (2013), founder of the *Everyday Sexism Project*, has reported many overt sexisms, ranging from domestic violence to threats of torture, death and rape, that exists in the database. As Jenkins and Finneman's (2018) study also shows, workplace abuse and harassment are overt and always slip between existing laws and policies.

Even in the animated film Zootopia, there is a more pronounced overt sexism (Naovaratthanakorn, 2017) (see also Fiaunillah (2015) The Lord of the Rings). Another study also analyses the feminist hashtag #aufschrei on Twitter and finds that anti-feminists use it to post many misogynistic messages (also of the overtly sexist variety) (Drüeke & Zobl, 2006). This discrepancy can be attributed to Mills' argument based on the fact that overt sexism is no longer socially acceptable, but the media feminist movement and the anti-sexist movement were less influential in the third wave of feminism than the current fourth wave. Tellingly, but not surprisingly, representations of sexism are largely context-specific; for example, direct sexism in some formal settings is difficult to articulate. Therefore, this study aims to analyse whether overt sexism is more challenging to express in a particular domain (e.g. media, workplace, school).

It is worthy to note that Sarrasin, Gabriel, and Gygax (2012) found that "research has so far only focused on forms of sexism characterised by antipathetic/negative attitudes toward women" (Sarrasin et al., 2012, p.114); this type of sexism, namely, overt sexism. Therefore, this paper will highlight previous studies' inadequacies and broaden the focus by considering more invisible forms of sexism - indirect sexism. Unlike overt sexism, indirect sexism is not intentionally harmful. Hence, indirect sexism might go unnoticed if those indirect behaviours are not defined as gender discrimination might not get more attention than it deserves. The detailed methodology for addressing the following research questions will be provided in the next section to achieve those intentions.

1)   Under the hashtag #everydaysexism on Twitter, which domain or topic has more sexism existing? If so, is there more overt sexism or indirect sexism?
2)   How are the linguistic markers employed in these overt and indirect sexism?

Methodological Overview

A corpus-based methodology is adopted in this paper: the corpus data consists of 1118 tweets that include all the English tweets posted within 12 months (from April 1, 2020, until March 31, 2021) in the hashtag #Everydaysexism on Twitter. It, in total, involves 37,579 tokens. Additionally, for the objectives of this paper, the corpus has to satisfy four criteria: those tweets only focus on women's experience of sexism; the contents are semantically clear and in English; those tweets are not replies and links to avoid duplicate data collection. Finally, 835 tweets from 1118 have been selected as research data. This paper involves, first and foremost, a quantitative analysis to provide an overview of the research object, and then it covers a qualitative analysis. The topic modelling (Melville et al., 2019) is used to conduct a thematic analysis. The sexist language framework (Mills, 2008) is used to reveal the overt and indirect sexist linguistic features. The first step is to analyse which areas or topics appear mostly sexist under this feminist hashtag, and in what ways is sexism present, directly or indirectly? Finally, the analysis of how sexism is manifested in the linguistic markers. The following sections describe the findings and discussion of this study.

Results and Discussion

To address the first research question, investigate which domain or topic under this hashtag has the most sexism in quantity, i.e. inferring which domains sexism is mainly occurring today. Accordingly, after conducting a thematic analysis using Melville, Eccles, and Yasseri's (2019) model, it was found that topic S2 (work, office, company, customer) had the most significant number of sexism cases, as shown in Table 1.

Topic number	Topic	Number	%
S0/S3	public space/transport/street harassment	110/1118	9.84%
S1	online/comments	197/1118	17.70%
S2	work/office/company/customer	290/1118	25.94%
S4	school/teacher/uniform	41/1118	3.67%
S5	media	182/1118	16.37%
S6	domestic abuse/relationships/home	15/1118	1.34%
Total		835/1118	74.78%

Table 1: The Distribution of the Topics

Note: The original topic modelling had seven topics, while this study codes S0 (public space/street harassment) and S3 (transport/street harassment) together because they all belong to sexism in the public sphere.

From the results in the above table, it emerges that indirect sexism has overtaken overt sexism in number as the dominant sexism in topic S2 (work, office, company, customer). As mentioned previously, Mills (2008) stresses that "overt sexism is more difficult to articulate these days." (p.12). However, overt sexism at 24.14% is not a small percentage; therefore, it is still relatively evident in the work domain. Table 2 provides an overview of the features of sexist language based on Mills' (2008) framework. Regarding the second research question, this section will combine a quantitative and qualitative analysis to reveal the indirect and overt sexist linguistic markers employed in the workplace and customer service domains ("S2" work, office, company, customer). As is clearly shown in table 2, the total number of indirectly sexist language found was 220 out of 290 tweets. The 127 tweets (43.79%) are presupposition; 51 tweets (17.59%) are androcentric perspectives; 18 tweets (6.21%) are humour; 15 tweets (5.17%) are collocation; 9 tweets (3.10%) are scripts and metaphor.

Overt Sexism

Subtypes	Rank	Occurrence	%
(f) First names, surnames and titles	1	32/290	11.03%
(c) Generic pronouns and nouns	2	11/290	3.79%
(d) Insult terms for women	3	10/290	3.45%
(e) Semantic derogation	4	8/290	2.76%
(a) Naming	5	5/290	1.72%
(g) Transitivity	6	2/290	0.69%
(b) Dictionaries	7	1/290	0.34%
(i) Jokes	8	1/290	0.34%
(h) Reported speech	9	0/290	0.00%
TOTAL		**70/290**	**24.14%**

Indirect Sexism

Subtypes	Rank	Occurrence	%
(b) Presupposition	1	125/290	43.79%
(f) Androcentric perspectives	2	49/290	17.59%
(a) Humour	3	16/290	6.21%

(e) Collocation	4	15/290	5.17%
(d) Scripts and metaphor	5	9/290	3.10%
(c) Conflicting messages (ISC)	6	6/290	0.00%
TOTAL		**220/290**	**75.86%**

Table 2: Overview of Overt and Indirect Sexism (Mills, 2008)

Presupposition

The frequencies of masculine terms that appeared in the 127 tweets are related to sexism at the level of presupposition, such as "he" and "husband". The following datum is taken to reveal the masked sexism. These findings show that when men and women are in the same work setting, and men are more likely to be assumed to be directors, have higher status and greater power - can be attributed to the fact that here, "director" is always presupposed to be a male referent (consider example 1) (Eckert & McConnell, 2003). Moreover, those presuppositions also evoked the notion of stereotypes. In this sense, stereotypical assumptions assume that women's primary working role is subordinate to men.

Rank	Frequency	Words
1	49	he
2	41	husband
3	22	male
4	20	him
5	15	man
6	11	guy
7	11	his
8	7	boyfriend
9	5	men
10	4	boys
11	4	dad
12	2	boy

Table 3: Male Words Used in Women's Sexist

1)   Is this #everydaysexism? I set up a company with my husband as a co-director. I am principal shareholder and only fee earner. He's receiving letters from accountants and service providers. I'm not."

Androcentric Perspectives

To draw on an example, it constitutes a form of indirect sexism that focuses on the male perspective. The women who are allowed to come into the boards, but simply that they only have less than half the quotas. It implies that men are more inclined to be accepted as board members in this demographic imbalance of gender-skewed working fields. It carefully avoids allegation of sexism; as Mills (2008) stresses when the working setting's androcentrism is not foregrounded, this type of indirect sexism is hard to identify.

2)   Getting boards to have quotas for #women is great. But why are they setting them at 40% when we are 50% of the population? #everydaysexism.

Humour

The following datum can illustrate that some high-frequency words seem to be "positive" appraisals of women's appearance rather than their workability, such as "lovely" and "cute". This argument is also supported by Jenkins and Finneman (2018), who indicates the audiences care more about female journalists' physical appearance; the high frequent evaluation words are "attractive", "glamorous", "look trustworthy", "new hairstyle", or "clothes". These words serve the indirect semantic derogation of women. In example 3, the utterance "14-year-old daughter" is an operation of irony in the expression of sexism that exaggeratively lower women's age. As Mills (2008) indicates, the irony is a typical strategy for humorous remarks. Additionally, the phrase "make-up" is found in 4 out of the 16 tweets. All of them refer to the cosmetics applied to the face after checking the context of each tweet (consider example 4). The male character describes "paintbrushes" as the cosmetic applicator, which is the overt playfulness on women. Mills (2008) expresses that humour usually exaggerates certain features associated with a group or uses and gives play to stereotypical knowledge for comic effect. "make-up" is a stereotypical image for women who are only concerned with surface appearance (Mills, 2008), which creates a sense that women only can be good make-up girls, not good painters. In the same scene, it rarely uses similar linguistic markers towards male customers.

Frequency	Words/Word phrase
4	Make up
3	lovely
2	Wearing
2	Look
2	cute

Table 4: Valuing Women Based on Their Appearance

3)   "You look like my 14 year old daughter" - unprofessional reply to a young entrepreneur seeking investment #r4today #everydaysexism.
4)   Buying art supplies including new paint brushes..old guy behind counter: "now remember, these aren't for make up " Me: ....!!! #everydaysexism.

Collocation

As Mills (2008) defines, collocations are concerned with the company that words keep, and table 5 shows 12-word collocations of the word "women" in the collocation corpus. The word "woman" generally keeps collocating with other words like "single woman" and "unmarried woman" that deliberately emphasize women's emotional states with negative connotations in the working scene. Here is discriminatory because "single men" and "unmarried men" are rarely used in the same way. In addition, "looks", "beautiful", and "beauty" seems to be female-referent words, and they appear in high collocational patterns with the word women. While the same findings by Carroll and Kowitz (as cited in Mills, 2008), they also find "rich", "famous", and "brave" are assigned to male-referent words. While examining lexical collocates can provide a preliminary insight into sexist linguistic markers, it is impossible to understand comprehensively without putting them in an authentic context. Similarly, "childcare", "housework", and "cook" seem to be a uniquely female familial responsibility. As a result, for example (5), women are asked to prepare "tea and coffee" for colleagues in meetings, a scope of work that is always limited to women only, in opposites compared to men.

Words	Collocates
woman women, she her	looks, childcare, unmarried, beautiful, tea and coffee, single, baby, beauty, housework, cook, appearance, marriage

Table 5: The Lexical Collocates of Women

5)   #JackieWeaver asserts authority in a meeting, the men try to silence and belittle her. This is #everydaysexism. Every woman has an example. When I was a young woman working in a senior role I would routinely be asked to make the tea & coffee in meetings. No men ever were.

Scripts and Metaphor

In what follows, scripts are brought into the hospital about women. In this male doctor's utterance, he gives a scenario script to the female patient and positions women as "liars". The women's speech is widely regarded as untrustworthy in a male-centred society. Such a case also often appears in political elections. As Alingasa and Ofreneo's (2020) case study shows, one president states that the next ombudsman must not be a woman because they cannot be trusted and lack integrity. Thus, this narrative also can be interpreted as a maligning storyline against women (Alingasa & Ofreneo, 2020). As Mills (2008) expresses, those speeches are difficult to characterize as overt sexism.

6)   Every woman expiriances #everydaysexism I saw it when I worked in male dominated environment. I felt it when I went to the drs saying I had stomach pains and the dr said 'you're over exaggerating because you're a woman'. I hear it when men say 'smile love, it might never happen'.

Conclusion

This paper is a corpus-based study of sexist language in the hashtag #Everydaysexism on Twitter. An English corpus is collected and classified into six domains/topics and sexist language types. After two quantitative studies, the main conclusion is that, surprisingly, the workplace and customer service domain have more sexism cases, which mainly manifests indirectly. Subsequently, it analyzes the linguistic markers of sexism. Another notable result is that indirect sexism highly occurs at the level of presupposition and androcentric - an overwhelming proportion in this paper, and they become the most common forms of indirect sexism. Nevertheless, overt sexism is still relatively apparent in its quantity, proving that overt sexism is also easily articulated, especially in first names, surnames, titles and generic pronouns, nouns.

These findings in this study expose some of the micro-aggressions of sexism in the workplace and remind individuals to consider appropriate language and behaviour to prevent the possibility of sexism. As Mills (2008) points out, indirect sexism is more difficult to challenge than overt sexism because it is impossible to identify words and phrases as inherently or explicitly sexist (Mills, 2008). However, as this study demonstrates, indirect sexist discourses

are still widespread in the workplace, so more work is to be done in this area of research. The limitation of this paper is that the interpretation of discourse/pragmatically meaning is individual. In a word, there are differences in the discursive interpretation of sexism between individuals. As a brief example, describing a working woman as a "young lady" is perceived by some as an over-interpretation of sexism; the speaker may not be sexist, but by others as indirect sexism - again, this explains why indirect sexism is difficult to challenge.

Acknowledgements

References

Alingasa, A. P. T., & Ofreneo, M. A. P. (2020). "Fearless, powerful, Filipino": identity positioning in the hashtag activism of# BabaeAko. *Feminist Media Studies*, 1-17.

Antunovic, D. (2019). "We wouldn't say it to their faces": online harassment, women sports journalists, and feminism. *Feminist Media Studies*, 19(3), 428-442

Bates, L. (2013, April, 16). *The Everyday Sexism Project: A year of shouting back*. Retrieved from https://www.theguardian.com/lifeandstyle/the-womens-blog-with-jane-martinson/2013/ap r/16/everyday-sexism-project-shouting-back

Brantner, C., Lobinger, K., & Stehling, M. (2020). Memes against sexism? A multi-method analysis of the feminist protest hashtag #distractinglysexy and its resonance in the mainstream news media. *Convergence (London, England)*, 26(3), 674-696. https://doi.org/10.1177/1354856519827804

Clark-Parsons, R. (2021). "I see you, I believe you, I stand with you":# MeToo and the performance of networked feminist visibility. *Feminist Media Studies*, 21(3), 362-380.

Drüeke, R., & Zobl, R. (2016) Online feminist protest against sexism: the German-language hashtag #aufschrei. *Feminist Media Studies*, 16(1), 35-54. https://doi.org/10.1080/14680777.2015.1093071

Eckert, P., & McConnell-Ginet, S. (2013). *Language and gender*. Cambridge University Press.

Femfuture (2021). Available online at: http://www.femfuture.com/why-now/ (Accessed Mar 18, 2021).

Fiaunillah, T. K. (2015). Sexist language in "The Lord of The Rings" film trilogy. *Language Horizon*, 3(1), 143-149. https://ejournal.unesa.ac.id/index.php/language-horizon/article/view/11866/11094

Golbeck, J., Ash, S., & Cabrera, N. (2017). Hashtags as online communities with social support: A study of anti-sexism-in-science hashtag movements. *First Monday*.

Guillard, J. (2016). Is feminism trending? Pedagogical approaches to countering (Sl)activism. *Gender and Education*, 28(5), 609-626. https://doi.org/10.1080/09540253.2015.1123227

Horeck, T. (2014). AskThicke: "Blurred Lines," Rape Culture, and the Feminist Hashtag Takeover. *Feminist Media Studies*, 14(6), 1105-1107. https://doi.org/10.1080/14680777.2014.975450

Jenkins, J., & Finneman, T. (2018). Gender trouble in the workplace: applying Judith Butler's theory of performativity to news organizations. *Feminist Media Studies*, 18(2), 157-172.

Melville, S., Eccles, K., & Yasseri, T. (2019). Topic Modeling of Everyday Sexism Project Entries. *Frontiers in Digital Humanities*, 5, 28. https://www.frontiersin.org/article/10.3389/fdigh.2018.00028

Mills, S. (2008). *language and sexism*. Cambridge University Press.

NAOVARATTHANAKORN, M. P. (2017). *A CRITICAL DISCOURSE ANALYSIS OF WOMEN'S LANGUAGE FEATURES USED IN AN ANIMATED MOVIE* (Doctoral dissertation, THAMMASAT UNIVERSITY).

Ricarda, D., & Elke, Z. (2016) Online feminist protest against sexism: the German-language hashtag #aufschrei, *Feminist Media Studies*, 16:1, 35-54. https://doi.org/10.1080/14680777.2015.1093071

Sarrasin, O., Gabriel, U., & Gygax, P. (2012). Sexism and attitudes toward gender-neutral language: The case of English, French, and German. Swiss Journal of Psychology, 71(3), 113–124. https://doi-org.ezproxy.lib.ouhk.edu.hk/10.1024/1421-0185/a000078

Talbot, M. (2019). *Language and gender*. John Wiley & Sons

Turley, E., & Fisher, J. (2018). Tweeting back while shouting back: Social media and feminist activism. *Feminism & psychology*, 28(1), 128-132.

Weatherall, A. (2016). Sexism in Language. *The Wiley Blackwell Encyclopedia of Gender and Sexuality Studies*, 1-2.

Contact email: amberw123@163.com

Towards Regenerative Cultures and Metanarratives in Girona:
A Transition Narrative-Design Case Study

Jan Ferrer i Picó, The Hague University of Applied Sciences, Netherlands
Bas van den Berg, The Hague University of Applied Sciences, Netherlands

The Barcelona Conference on Arts, Media & Culture 2021
Official Conference Proceedings

Abstract

At the age of a failing economic system and undeniable evidence of the effects humankind has had over the planet, it is necessary to look for alternatives to the way we live locally. This article explores the use of designing narratives and metanarratives to co-create imaginaries serving as the needed alternatives. This research starts by considering the historical factors to understand how industrialisation and the loss of traditional practices created a culture of disconnection from Nature in the Girona area, but also looks at why people start now reconnecting with it. The analysis is the foundation for speculative design practices to co-create a new local narrative of connection and regeneration. The project adopted the Integrative Worldviews Framework and used paradoxes to create possible future worldviews based on historical factors and literature. Citizens participated in conversational future-visioning workshops to develop and evaluate their local imagery of the previously created worldviews. This conversation-based exercise evidenced the potential of paradoxes in destructive futures to create imaginaries of regeneration. These imaginaries merge and form future stories. From the future narratives, the practice created cultural artefacts embodying a new culture of connection based on storytelling, traditional jobs, and a mythological understanding of Nature. Finally, as observed at the end of the project, these artefacts allow citizens to adopt them as their culture and expand their current worldview.

Keywords: Global Change, European Cultures, Design, Transitions Design, Case Studies

iafor

The International Academic Forum
www.iafor.org

1.   Introduction

1.1.   It's a Matter of Culture

"As Homo Sapiens' entry in any intergalactic competition, industrial civilisation would be tossed out at the qualifying round. It doesn't fit. It won't last. The scale is wrong. And even apologists admit that it is not even pretty. The design failures of industrially / technologically driven societies are manifest in the loss of diversity of all kinds, destabilisation of Earth's biogeochemical cycles, pollution, soil erosion, ugliness, poverty, injustice, social decay, and economic instability."

–   David Orr at *Earth in Mind*, 2004

Humankind is overcrossing planetary boundaries and pushing whole eco-social systems to the brink of collapse (Masson-Delmotte et al., 2021; Raworth, 2018). Throughout recent history, with intensification since the industrial revolution, we have built an extractive economy deeply rooted in a consumerist culture with far-reaching consequences across planet Earth. As David Orr (2004) describes above, our era is one of interconnected crisis; these are not just ecological such as loss of biodiversity, soil erosion, or climate change. Instead, their roots might primarily reside between our ears; their causes are embedded in and emerge from our worldviews, values, and lenses into our culture and behaviour. The extractive system further nurtured the development of an individualistic worldview defined by the disconnection among humans and the planetary and universal systems and dynamics we depend on. This individualist perception is contrary to a more systemic view of life (Capra & Luisi, 2016; Wahl, 2016) which connects locally, with scales, and the ontological position that we are part of nature. This state of individualistic disconnection from systemic interconnectedness, which is at the root of the collective socio-ecological crises we face, is characteristic of the metanarrative of our neoliberal cultures. Alternatively, other metanarratives where the connection between humans and nature abides have been and remain possible. For example, the Yaqui peoples, in Sonora (a north-western state of Mexico), consider "bawe asu" (grandma sea), "taa'a" (sun), and "meecha" (moon) as their ancestors and explain the geographical and climatic features through a tale of living beings triggering conditions for sustained life (Comision Nacional de Areas Naturales Protegidas, 2011). Through this conception, they live according to the appreciation of an interdependent life and planet. This reconnection with the complexity of the living systems and the more-than-human world, i.e., to take a more appropriate role in the Earth system, is paramount if we want to stop the current trajectory of mass extinction. Ives et al. (2020) identify this inner dimension of sustainability as the most powerful place to intervene for systemic change. However, intervening at this level of interconnected complexity can be considered a wicked problem (Rittel & Weber, 1973). Therefore, requiring radical new approaches that focus on reconnecting with the appropriate scale for Orr's intergalactic competition. In this paper, we propose that one such approach can be found at the intersection of transition design (TD) and narrative, using TD to redesign narratives of place as a way of intervening towards more sustainable trajectories than the ones currently in prospect.

1.2   Design, (Meta)Narratives and Transitions

'Worldviews' are the inescapable, overarching systems of meaning and meaning-making that to a substantial extent inform how humans interpret, enact, and co-create reality . In their turn, 'mental models' are the filters through which we interpret our experiences, evaluate plans, and choose among possible courses of action . Thus, these could be considered the same elements of a metanarrative that functions as a lens through which we interpret the world. These are

commonly expressed through traditions, behaviours, societal structures and systems, cultural artefacts, and transmitted through stories and legends. These 'designs' are the building blocks that configure paradigms, and paradigms are the deepest leverage points for systemic change . Hence, if it is possible to transform a culture's metanarratives, it may be possible this unfolds to changes in societal paradigms and readdress trajectories for the human presence on Earth (Wahl, 2016).

Because the metanarrative is behind our interpretation and informs how we relate to and are in the world, it can be found embedded in objects and systems, e.g., books imply knowledge can be expressed by human languages beyond orality and kept physically for an undetermined time; an industrial paper cup embodies a fast-paced culture with little care for materiality or immediate or non-location-dependent pleasures and so on. As most artefacts are created 'by design', the practice of design contributes to co-shaping the metanarratives that shape our interpretation of the world. The dynamics between worldviews and the role of design are further explored by Wahl (2021) through the analogy of the hydrological cycle shown below in fig 1. Because of rainfall, worldviews inform design, and in its turn, designs (through evaporation), modify the worldview construction. Thus, creating a mutualistic reinforcing relationship between change in metanarrative and design through objects, services, and systems. This implies a responsibility for design practice in co-shaping, positively and negatively, society's metanarratives that co-determine which (un)sustainable futures are (im)possible and (im)plausible (Dunne & Raby, 2013).

Figure 1: Illustration of the Mutualistic Relationship Between Design, Reality and Worldviews Through, the Hydrological Cycle Analogy

1.3   Towards Transition Design for Cultural Change

This responsibility means design practice must be used critically to ensure its participation in creating new metanarratives with potential to shift socio-ecological paradigms towards more sustainable futures. The area of design engaged with transition challenges such as these is called Transition Design (TD) and actively aims to intervene on wicked problems such as biodiversity loss or the transition towards renewable energy (Iwabuchi, 2019; Schmidlin, 2018).

In this study, we present a TD-driven approach that utilizes narratology to challenge, disrupt, and transform the underlying mental constructs that inform the metanarrative of neoliberal individualism and separation. To do so, we zoom into a particular case in Girona, Catalonia, modern Spain. This is presented below in the form of an unfolding narrative, in which the relationships between TD as a practice to (re)design meta-narratives, cultures, and the emergence of alternative stories about who we could be and how we could relate to more appropriate scales, are shared. We close by reflecting on the appropriateness, challenges, and opportunities for such a TD for working with wicked problems.

2.   The Case – The Four Rivers City

Girona, also known as *The Four Rivers City* by locals, is found at the confluence of four rivers in the Mediterranean basin. Part of this area is susceptible to floods and, for a long time, periodical floods caused damages to buildings and the city's inhabitants, especially to those that occupy the natural draining area of the rivers. Because of its northern Mediterranean location, it has received a strong influence from both Classical Greek and Roman cultures and has had a strong Catholic influence ever since (comparatively Arabs ruled this area for roughly six decades). At a short distance from the Mediterranean Sea and the Pyrenees Mountains, it has also been a place of transit for peoples and cultures. Yet, now the Mediterranean basin is one of the most impacted regions by global heating, and Girona is also to struggle from these climatic changes. As climate dynamics transform due to global change; floods and droughts will increase in intensity and frequency, endangering (fresh) water supplies in the city as well as the nearby metropolitan area of Barcelona who also relies on these rivers for their water supply. In addition, the projected changes place potentially severe limits on the food-production capacity in the Ter basin and strain on the ecosystems that depend on the current weather and river dynamics. Because of the historical, cultural, and economic importance of the rivers to Girona, i.e., the rivers are akin to blood flowing through the city's body, our inquiry explores the transformation of metanarrative through the lens of the way that locals relate to the rivers. That means looking at alternative understandings of the rivers to those our research found in the city's inhabitants: the river as a service, either purely instrumental or with self-entity and meaning.
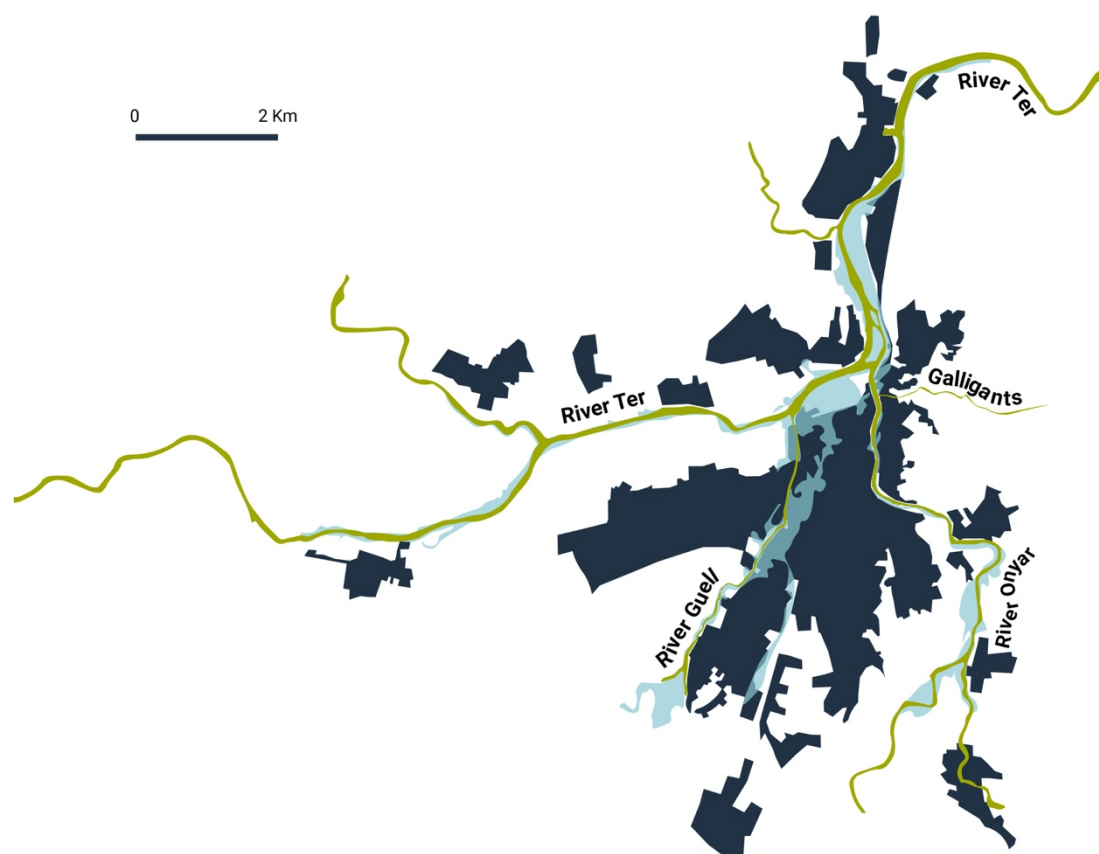
Figure 2. Map of the Girona Metropolitan Area. In Dark Blue, Built-Up Area (Excluding Roads and Other Infrastructure). In Light Blue, Flood Area for a 10-Year Return Period (Simplified). In Olive Green, Current River Stream. Based on Data from the Institute of Cartography and Geology of Catalonia (ICGC), and the Catalan Water Agency (ACA). Retrieved in 2021.

2.1   Identifying the Current Relationship to the Rivers

Cultures are formed through the result of long co-evolutionary processes that while deeply ingrained in our day-to-day lives, are easily forgotten. The TD approach starts by unwrapping the historical dynamics through which a wicked problem emerged to identify the most likely future trajectories currently in prospect. In doing so, a multiplicity of data including historical document analysis and engagement with current inhabitants is used. For the overall TD analysis, we used the narrative of transition mapping approach (Van den Berg et al., 2021). This approach utilizes abductive analysis and maps different forms of data to create a longer-term perspective of the dynamics of how a wicked problem emerged. The data for this included contemporary empirical data as well as historical documents. Among them a small-scale survey of inhabitants from the municipalities of Salt, Girona, and Sarrià de Ter. For this, we followed the protocol of Hedlund-de Witt (2013, p 144-145) for the Integrative Worldview Framework (IWF) which is a classification rubric to define western worldviews in four categories: traditional, modern, postmodern, and integrative (Hedlund-de Witt, 2013, p 264-265). The answers were classified according to the IWF profiles to provide a snapshot of citizens perspectives in the broader region. The results indicated that 34,3% of the participants hold an integrative worldview, 20,5% large postmodern, and 44,3% a largely modern perspective. It is important to note here that participation here was on a volunteer basis, and self-selection bias may have intervened with the validity of the results. In particular, we expect a broader sampling to lead to a higher percentage of modern worldview.

In addition, historical document analysis was performed on publicly available data about the history of the place, with a particular focus on identifying powerful cultural events and signs of narratives of resistance to the dominant perspectives of the historical time in which the data was situated. To do this, literature about the place's history with a focus on the use and management of water were mapped from the early 18th century onwards. This period was chosen because of the tipping point they represent in de development of modern and contemporary culture . To fill in gaps based on historical evidence, three semi-structured interviews with local experts on landscape and human-river relationships were conducted. In these interviews, particular attention was placed on the co-dynamics of forces at multi-system levels that shaped the present-day narratives surrounding Girona's rivers. Finally, the resulting transition map was translated into a feedback loops diagram (fig 3).
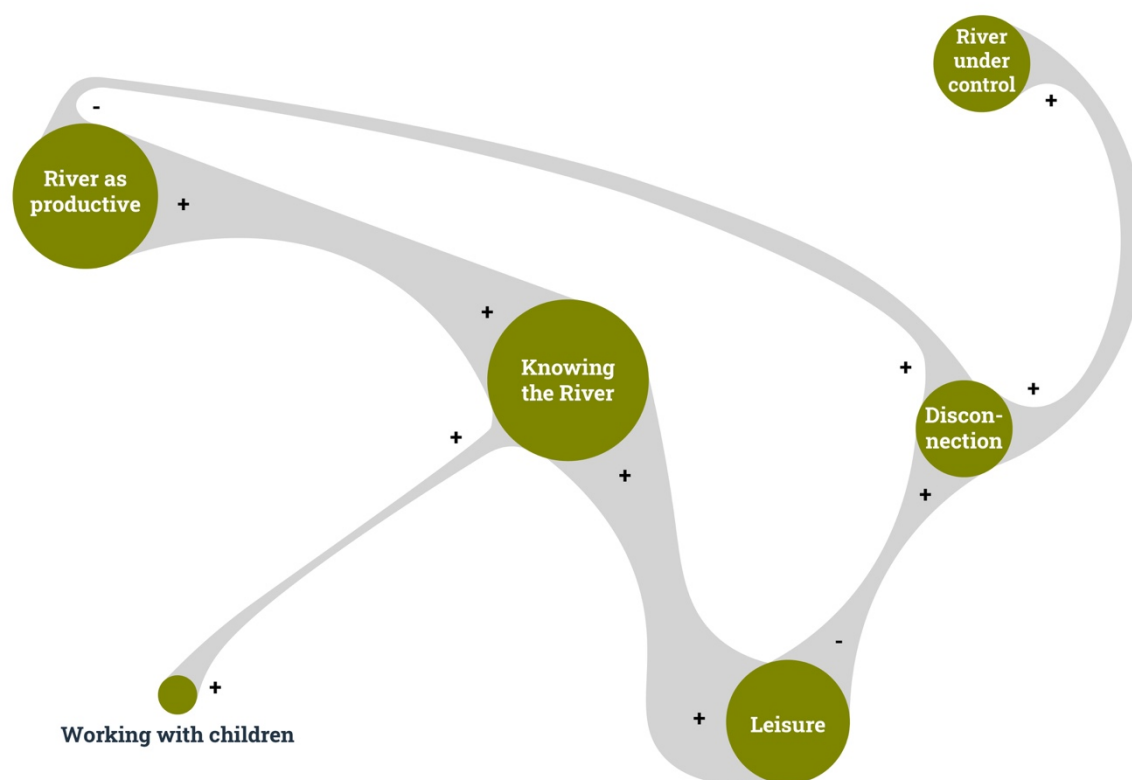
Figure 3: Simplified Feedback Loops Map About the Elements Defining Connection and Disconnection with Nature. The Width of the Relationships Indicates the Frequency They Were Mentioned. Addition and Subtraction Signs Indicate Positive and Negative Relations for Each Direction of the Relation.

2.2   Severing the Umbilical Cord with the Rivers

The current narrative around the rivers was formed through long term influence of roman law that is prevalent in global north-western societies like the understanding of 'inviolable sacred private property', or the 'civic' classical Mediterranean tradition of controlling and embellishing nature. Regionally speaking, other cultural trends played a role in constructing the current culture like the friction between the adopted Germanic brutalist conception of nature in the mid 19th century (Modernism) and the opposing Mediterranean tradition of humanising nature (*Noucentisme*). When other aspects are considered, like the impact of the industrialist culture in the city, we can reconstruct the emergence of the current place morphology,

traditional activities (or loss of them), culture and worldviews to their current state. During the past two centuries, numerous factories were built around the city because of the abundance and easy access to water. However, these activities have polluted the rivers and river shores to the point people living there couldn't use that water nor spend time near it for its insalubrious state. The canalisation of the city rivers to hide the polluted waters and avoid them from flooding the city led to a further disconnection between the inhabitants and rivers. Then, tap water access and water reservoirs allowed people to have immediate access to the liquid mineral and prevented floods while altering the natural regenerative dynamics of the river system. As water management practices favoured anthropization of the region, infrastructure created a sense of perceived safety for the Gironans. As a result, the local and collective knowledge of being in a dancing relationship with the rivers has been (largely) lost. This resulted in a contemporary disconnection of Gironans with nature, especially with the rivers, one of the most important sources of life that flows into and through the city. Through this process of disconnection, people passed the responsibility of taking care of the rivers to the, often hidden behind nameless bureaucrats and organizations. In response, popular conservation initiatives are put in place but reportedly sabotaged by human beings who prioritize their own (hedonistic) interests . Only now, with delocalised factories and production, the rise of ecological movements in the area, and more recently the global impact of Covid-19 lockdowns raising reflection over the way we live in relationship with nature, there is a budding change in the perception about natural spaces and habitats within city borders as many realised how much we need access to 'nature'. This change is aligned with the relatively high presence of Integrative leading worldviews that was found in the survey.

2.3   An Approach to Designing Cultures and Their Artefacts

Cultural changes are slow and although they can be imagined, they cannot just be designed and implemented in places and their peoples. Instead, design can influence the collective imaginary of societies and create artefacts that serve as polar stars to come. In other words, design may be able to nudge towards alternatives, perhaps even brazenly so (e.g., Dunne & Raby, 2013), but any singular artefact is unlikely to change the way people relate to the rest of the natural world. TD could play role in solving wicked problems in co-defining new futures for society and making these tangible through design artefacts as bridges from desirable potentiality to reality. This should be understood as a practice of speculation (idem) which allows the crafting of new imaginaries with alternative metanarratives to be created and expressed to build more sustainable futures. Then, the job of the designer is to translate these visions into everyday 'stuff', practices, or systems as an ongoing influence on metanarratives. In other words, to use design practices to make alternative ways of relating, more life-affirming ways of relating, possible.

In the case of the city of the rivers, we engaged with this through the co-creation of three distinct futures and artefacts for future human-river relationships within Girona — with special attention to embodying an appropriate relationship with the river and the Earth system. To create these futures, we began by challenging worldviews and descended to the creation of tangible artefacts that could play a part in a co-learning conversational process. This was entirely done with volunteering inhabitants of Girona. To define the three worldviews, we used two different approaches: a normative (1) and a predictive approach . The first (1), which disregards current worldviews to imagine a future worldview, focused on combining information from eight sources of literature about regenerative cultures, worldviews, and the Yaqui peoples in Sonora. We also used a second predictive approach to produce two worldviews (2 and 3) based on paradoxes of the current dominant worldviews and events

because of their potential for emergences (Wahl, 2016). All worldviews were then structured and defined according to the IWF.

Paradoxes for worldview 2	Paradoxes for worldview 3
Subjective reality and constructivism vs. technological development.	Environmentalism and nature consciousness vs. economic growth, markets, and capitalism.
Importance of nature (recognition of dependency) vs. anthropocentrism and culture of separation.	Spiritualism and meditative practices vs. knowable reality through since and technology.
	Resources, profits vs. individualism, welfare, and progress.

Table 1. Paradoxes Chose to Drive the Creation of Two of the Future Worldviews.

Yet, worldviews don't provide a picture of how the future could be — but just of how people might think. Therefore, to understand the relationships between humans and nature it is necessary to translate these into narratives of the future. This translation process is also an opportunity for further participation in the research approach by integrating people's expectations, dreams, and fears about the future, i.e., in the further co-definition of two layers of the imaginary futures: the everyday imaginary and the meaning behind those imagined futures. To enable this participation, the worldviews were transformed into a deck of cards used in 5 workshops with individuals and groups of people to trigger their imagination and define a different everyday vision of each worldview.
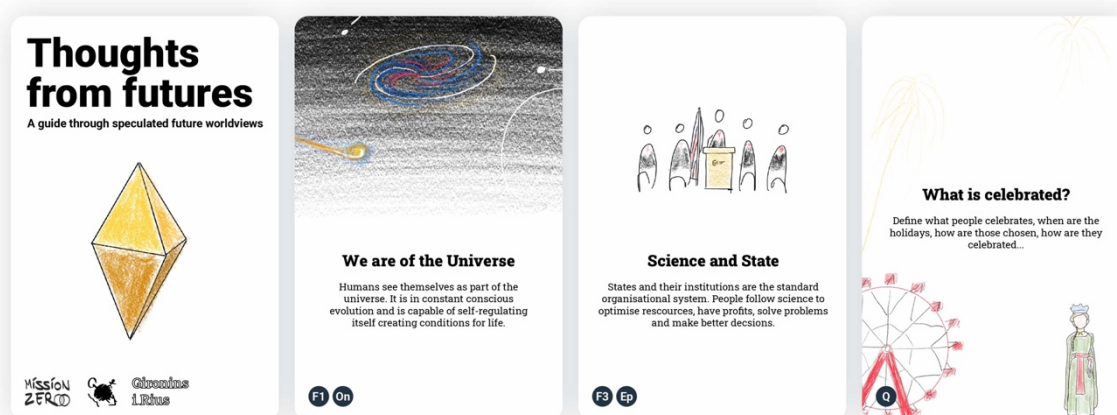
Figure 4: Illustrated Version of Some of the Cards Participants Were Given to Play with.

Participants were guided through the process with question cards about the day-to-day life of the citizens such as "what is celebrated?" and "what uses do rivers have?". The outputs from those conversations were merged into three futures, one for each worldview. Then, a transitional narrative was made for each of the futures by backcasting to the present using the original transitional analysis 3-layer matrix and expressing it in form of speculative history-book narratives. These resulting possible narratives were thus informed by the historical data, as well as through the inhabitants in the form of workshops, representing a mosaic of desired

possibilities. These were subsequently assessed using the three-horizons framework (International Futures Forum, s.f.). Through this framework, we classified the elements of the futures as innovations towards a regenerative culture (H2+), innovations with potential but probably absorbed by the current capitalistic culture (H2-), or innovations sustaining the current paradigm of separation (H1). Finally, the definition of the regenerative future (that of worldview 1) is updated including the new insights.

The final part of this case is the translation of these regenerative futures into tangible artefacts. Although design, traditionally, has focused on object-artefacts, contemporary design disciplines broaden the scope of design. As such it could be understood that design can create "all" sorts of cultural artefacts. Cultural artefacts are concrete expressions of a culture, either on tangible objects or intangible elements as could be events, stories, traditions, or systems.

Cultural artefacts are proposed through an ideation process and reviewed to evaluate their speculative and transitional potential. To do so, the proposed artefacts were sent to three of the participants of the workshops for review, as well as three additional people involved in local environmental groups. This process was repeated for three iterations and resulted in the final artefacts presented in the rest of section 2.4

2.4   Bridging the Future and the Present

Through conversations, participants defined diverse social systems and norms, spaces, traditions, and provided new perspectives on how those worldviews influence these imagined future societies. The resulting narratives for each future expressed these transitions, as mapped in fig 5, introducing speculative events like the "Toxic soil crisis" or "Second Renaixença" (Second Catalan Renaissance, note that European Renaissance differs in time, circumstances, and characteristics from the Catalan) to literally describe the transition, as well as a description of the new everyday as shown in table 2.
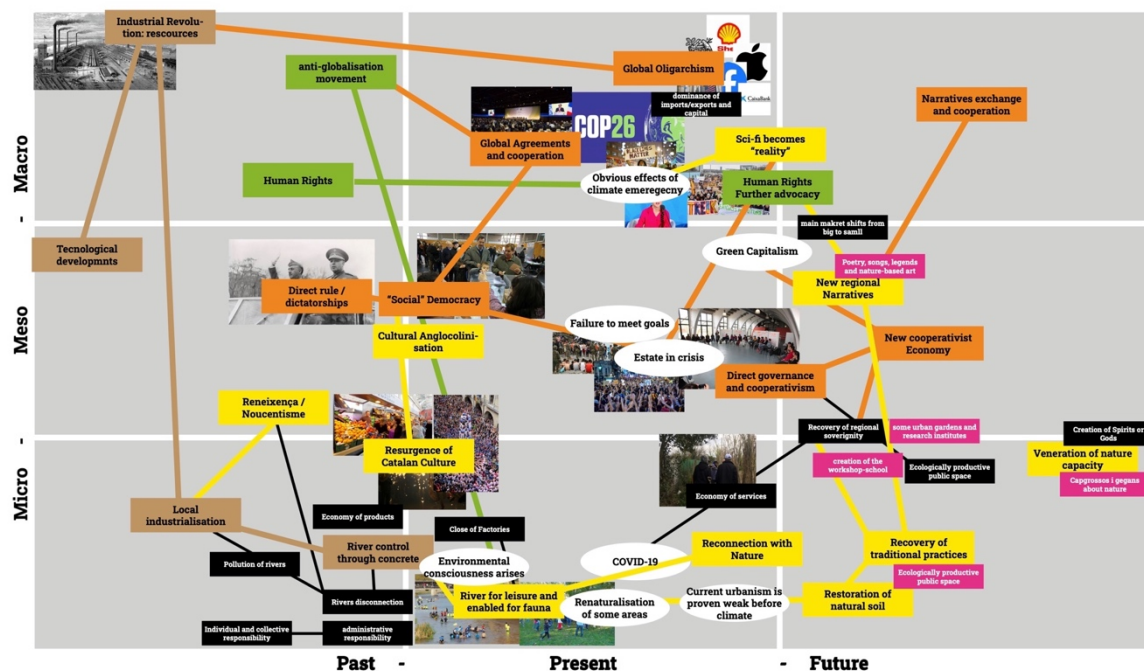
Figure 5: The Multi-Layer Matrix Used to Backcast the Speculated Future 1.

The artefact evaluation provided feedback on the metanarratives people read in the artefacts, and especially on how deeply people read into them. As result, the artefact explicitly revolves around the river and the stories as indirect associations were rarely perceived. This artefact consisted of a festival about river stories and a legend about the river's origin that combines scientific knowledge with popular iconography and a nature-centric (although not scientific) genesis of the river and life conditions in the basin. How the worldview links down to the artefact and expresses the future, including those H2+ elements that were previously identified, is shown in the following table, and a visual expression of the festival through a poster is shown in fig 6.

Future Layer	Explanation
Worldview	Culture is perceived as universal (regarding the whole of the universe, its consciousness and all its life), yet locally specific and individually variable through multiple ways of living. Belonging to that culture exist the languages of the more-than-human world and the use of knowledge and wisdom provided by them. This requires all systems to be able to freely communicate. In the human world that is done, especially, through arts and stories. This society considers itself as part of nature, and therefore it is something productive and efficient at ensuring life continuity across scales. The power of these relations is unfolded through a symbiosis of tradition, life, and technology at the local level.

Re-evaluation additions from the futureing workshops (H2+)	The individual exists as a part of the system, connected with its inner essence, and needs and the collective interest and needs. Modern technology provides supplementary tools for this connection and the communication with the more-than-human.
Everyday Imaginary	Local communities develop their own industry based on what they are provided and what they need, especially agriculture. Traditional practices as basketry and wicker culture are recovered as ways to provide but also as a tool for landscape and ecological stewardship. As a result, the concept of residue and waste no longer exists. Education puts far more emphasis on natural education besides linguistic and logic, and it is woven with the local culture and craftmanship practice as means to empower young citizens to be stewards of the community and place. Legends and traditional stories keep being essential to co-defining the identity of the place, but with much more importance. Local and foreign stories are means to learning not only about the place worldview but also perspectives from other cultures, especially minorities. For this latter purpose, travellers and modern troubadours are storytellers bringing tales from around the world. They are also a means to understand and learn about the more-than-human world, history, and spirituality.
Cultural Artefact	The importance of the community life enables the city to keep hosting festivals of all sorts, many including stories, as *The Rivers Stories Festival* (Fig 4) where people gather to learn stories about water, remember their legends, and teach children about river agriculture and stewardship and the crafts of what the rivers provide. In this festival legends like the one of *Ter i Bastiments* are explained as a celebration of the sacred role of rivers for life in the region.

Table 2: The Layers Comprising the Collectively Speculated Regenerative Future and Culture.
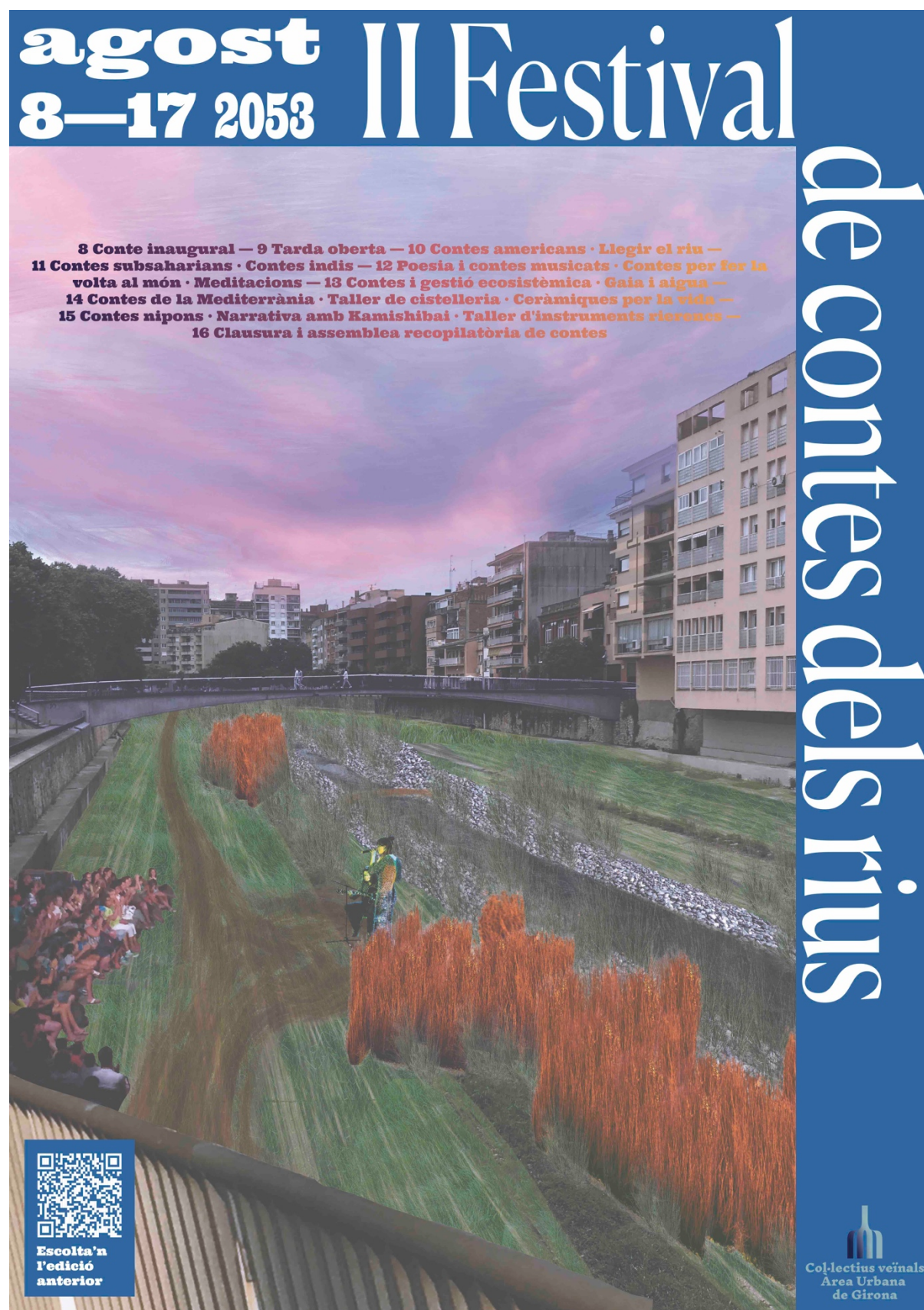
Figure 6: Speculative Poster of the River Stories Festival in Girona (In Catalan).

3.   Discussion

3.1   Design and Narratology Meet for a New Society

This case in Girona displays how engaging with worldviews is a way to the creation of artefacts, but also that every artefact, irrelevant as it might seem, is an embodiment of values and ways to understand the world that unfold as metanarrative foundation of that artefact. Hence, designers should not only engage with narratives for storywashing, i.e., to market their ideas or tap into empathy from users, but as a fundamental part of design practice when engaging in co-shaping the world. This is relevant since when an artefact interacts with other actors and agents a dialogue arises from which potential futures emerge (Manzini, 2015), giving ownership of the imagined future to all parties. Through design, and subsequent dialogues that occur between users and artefacts, people accept, reject, and transform ideas and worldviews and, as result, culture evolves.

In a situation of climate emergency, it is more than ever necessary to engage in those dialogues and transitions to adopt new relational narratives that could lead to more sustainable ways of being (Ives et al., 2020). In fact, the seeming acceptance of the proposed artefacts once displayed in public could suggest there is an inner desire from people to the proposed future alternatives, although more research is required to make this claim strongly. There is, however, as has been seen by the level of engagement for this work in Girona, a place for a more metanarrative-driven TD practice. Even though the resulting artefacts of such an approach are highly contextually bound and situated in place, we believe such an approach (or others like it) could be scaled and adjusted to other places, systemic scales, and wicked problems. However, it is important to note that as the scale increases, it will become more difficult to engage with these practices in a sufficiently inclusive manner to include the key agents involved in co-constructing existing as well as future sustainable narratives of place. This is a weakness of both transition-oriented and design-oriented approaches more generally, which tend to privilege the voices of those who already hold power (Wittmayer et al., 2021).

3.2   Acknowledging the Barriers

While engaging with TD to reshape worldviews is necessary and possibly effective as a way of projecting new cultural paradigms and behaviours that allow (human) life to continue existing on Earth, it is also very ineffective at dealing with the current urgency; both as a time-consuming research approach, and because cultural changes tend to be slow and complex in general. In this study, we propose that translating TD insights into tangible artefacts can be a more pragmatic approach to create these needed shifts that could unfold towards more sustainable futures. And through this, also identify key barriers such as obstructive laws or traditional practices and customs (e.g., over-regulating food production to require unsustainable practices) that have to be transformed to make regenerative imaginaries reality. However, when engaging with this approach to design it is important to be mindful of the dynamic nature of complex adaptive systems and wicked problems. Further research into practical ways of navigating these different responsibilities and how to educate designers to work in this way is required. In particular, longitudinal engagement and studies that follow how a place develops during a process of narrative-driven TD are essential.

3.3   From Now on, Engaging with Worldviews in Co-Design

An additional limitation of these sorts of practices is the required convergence of diverse disciplines with a local embedded view, without losing sight on the way those local relationships are connected globally and situated historically. This is needed to be able to sensibly assess and explore the historic transitional narrative, be able to do so in location in a sufficiently sensitive way, and be aware of the different perspectives and unspoken events of history and identity. Besides, when working very locally but with regional or global awareness information is not always available and connecting the dots to create a more complete picture around culture requires experts to come together to find connections between their knowledge and the gathered information. For this, the use of an abductive approach could provide a pragmatic way forward. In this case, our exploration focussed on the rivers and human-nature relationships in place. Any design researcher(s) aiming to perform these practices should be knowledgeable of humanities much beyond what is normal in current educational practice, they possibly must ensure they work in a multidisciplinary team and have to nurture relationships to the place where they are working, with great cultural, social, and ecological sensibility. In other words, a different approach to design practice for sustainability transitions also asks for different knowledges, skills, and attitudes from design practitioners.

The emerging narrative-driven TD used across the project can be further improved and attuned to the particularities of each project and place. As such, in the analysis phase, it is required to improve the current worldviews evaluation tools, looking deeper at existing methodologies and improving the process by which people are clustered – or the ethics of clustering people. Also, the 3-layer matrix to evaluate the transitional narrative can be expanded to include more complex relationships, perhaps using casual loops or mixed methods combining the cause-effect, interlinked relationships, and the narrative approaches. Engaging with more experts and doing so collectively in workshops instead of interviews (or both) could be a good approach to reveal connections among their knowledge and insights that other ways could be unperceived. At the same time, questioning who counts as experts, and why they do, for these approaches is important. For this latter point, there is much that can be learned from other fields of inquiry such as the arts or anthropology.

4.   Conclusions

This paper explored the possibility of using a narrative-driven TD to interact with redesigning metanarratives for transitional purposes, especially for regenerative transitions. This was explored through a case study in Girona using elements from TD as well as speculative design to create artefacts from imagined futures of human-river relationships in Girona.

The study shows promise for such an integrated approach that could lead to long term transformations of how people relate with place. Early indications that translating potential futures into tangible artefacts that embody the worldviews and values or personal elements of such sustainability (Ives et al. 2020) is powerful for establishing those were observed. But doing so requires the embracing of complexity, local cultures, and transdisciplinary engagement across a variety of expertise's, timescales, system's levels, and knowledges. Perhaps more importantly, it is essential to engage with this work with the knowledge that the work is slow. And the changes to metanarratives and cultures may never truly unfold. In a way, engaging in such a narrative-driven TD is akin to a leap of faith. That should, however, not stop design practitioners from engaging with such practices to co-create more sustainable

futures while we still have a chance to shift trajectories from the destructive path we are collectively on.

Acknowledgments

References

Abram, D. (2020, July 28). The Ecology of Perception - David Abram. *Emergence Magazine Podcast*. (E. Vaughan-Lee, Interviewer) Emergence Magazine.

Andersson, J. (2021, January 18). *An Economy of Place*. Retrieved from Activate The Future: https://medium.com/activate-the-future/an-economy-of-place-part-1-6868c14092b2

Associació Naturalistes de Girona. (2021, September 21). *Donem per acabat el projecte de recuperació de basses a Sant Daniel 2020-21*. Retrieved from Associació Naturalistes de Girona: https://www.naturalistesgirona.org/ca/noticies/donem-per-acabat-el-projecte-de-recuperacio-de-basses-a-sant-daniel-2020-21.html

Board of International Research in Design. (2008). *Design Dictionary*. (M. Erlhoff, & T. Marshall, Eds.) Birkhäuser.

Capra, F., & Luisi, P. L. (2016). *The Systems View of Life: A Unifying Vision*.

Colombatto, E., & Tavormina, V. (2017, June). *The Origins of Private Property*. IEL Working Papers.

Comision Nacional de Areas Naturales Protegidas. (2011). *Coocimiento Ancestral Yaqui. Sobre el uso, manejo y conservacion de los ecosistemas. Yowem bat naateka juneyau juya ania betana*. Sonora.

Dunne, A., & Raby, F. (2013). *Speculative Everything: Design, Fiction, and Social Dreaming*. Massachusetts Institute of Technology.

Earth Advocacy Youth. (n.d.). *YEA's Earth-centred Language Guide*. Retrieved April 2021

Gaziulusoy, I., Boyle, C., & McDowall, R. (2013). System innovation for sustainability: a systemic double-flow scenario method for companies. *Journal of Cleaner Production*, 45, 104-116.

Hedlund-de Witt, A. (2013). *Worldviews and the Transformation to Sustainable Societies: An exploration of the cultural and psychological dimensions of our global environmental chanllenges*.

Hekkert, P., & van Dijk, M. (2017). The ViP Process. In P. Hekkert, & M. van Dijk, *Vision in Design. A Guidebook for Innovators* (pp. 131-187). BIS Publishers.

International Futures Forum. (n.d.). *Three Horizons. The Approach*. Retrieved 2021, from International Futures Forum Practice Centre: https://www.iffpraxis.com/3h-approach

Ives, C. D., Freeth, R., & Fischer, J. (2020). Inside-out sustainability: The neglect of inner worlds. *Ambio* (49), 208–217.

Iwabuchi, M. (2019). *Case Study on Transition Design: Speculation of Life in 2050 from Kyoto (Part 1)*. Retrieved 2021, from Predict: https://medium.com/predict/case-study-on-transition-design-speculation-of-life-in-2050-from-kyoto-part-1-118cb06b15d

Manzini, E. (2015). Innovation, toward a New civilisation. In E. Manzini, *Design, when everybody designs*: *An introduction to design for Social Innovation* (pp. 9-28). The MIT Press.

Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.) (2021). *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Retrieved from Intergovernmental Panel on Climate Change (IPCC).

Meadows, D. (1999). *Levrage Points. Places to Intervene in a System*.

MedECC. (2020). *Climate and Environmental Change in the Mediterranean Basin – Current Situation and Risks for the Future. First Mediterranean Assessment Report*. Marseille: Union for the Mediterranean, Plan Bleu, UNEP/MAP.

Mell, I., & Whitten, M. (2021). Access to Nature in a Post Covid-19 World: Opportunities for Green Infrastrucutre Financing, distribution and Equitability in Urban Planning. *International Jorunal of Environmental Research and Public Health*, 18(4), 1527-1543.

Nguyen, N., & O. Bosch. (2013). A systems thinking approach to identify leverate points for sustainability: A case study in the Cat Ba Biosphere Reserve, Vietnam. *Systems Research and Behavioral Science* (30), 104-115.

Nogué, J., & Vicente, J. (2004). Landscape and national identity in Catalonia. *Political Geography* (23), 113-132.

Orr, D. W. (2004). *Earth in Mind*. Island Press.

Raworth, K. (2018). *Doughnut economics*. Random House UK.

Restor Rodriguez, M. M. (2017). La identidad yaqui i el agua. In J. L. Martínez Ruiz, D. Murillo Licea, & L. Paré, *Conflictos por el agua y alternativas en los territorios indígenas de México* (pp. 83-98).

Rittel, H., & Weber, M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, 4, p. 155-169.

Rockström, J., W. Steffen, K. Noone, Å. Persson, F.S. Chapin, III, E. Lambin, T.M. Lenton, M. Scheffer, C. Folke, H. Schellnhuber, B. Nykvist, C.A. De Wit, T. Hughes, S. van der Leeuw, H. Rodhe, S. Sörlin, P.K. Snyder, R. Costanza, U. Svedin, M. Falkenmark, L. Karlberg, R.W. Corell, V.J. Fabry, J. Hansen, B. Walker, D. Liverman, K. Richardson, P. Crutzen, and J. Foley, 2009: Planetary boundaries: Exploring the safe operating space for humanity. *Ecol. Soc.*, 14, no. 2, 32.

Sacks, S. (2017, November 17). Review: The Works of Ursula K. Le Guin, Sublime World Builder; The author's sui generis science fiction is rooted in linguistics and cultural anthropology. *The Wall Street Journal*.

Sanders, E., & Stappers, P. J. (2013). *Convivial Toolbox*. BIS Publishers.

Schlaile, M. P., Kask, J., Brewer, J., Bogner, K., Urmetzer, S., & De Witt, A. (2021). Proposing a Cultural Evolutionary Perspective for Dedicated Innovation Systems: Bioeconomy Transitions and Beyond. *Journal of Innovation Economics & Management*.

Schmidlin, N. (2018). *Design for Transitions: an Exploration of Practice*.

Sobrevila, C. (2008). *The Role of Indigenous Peoples in Biodiversity Conservation. The Natural but Often Forgotten Partners*. Washington D.C.: The International Bank for Reconstruction and Development / THE WORLD BANK.

Van den Berg, B, Bustamante Castillo, B.G., Wissingh, T. (2021) Regenerative Education for The Ecological University in Times of Socio-Ecological Crises – Educational Design Dispositions, Qualities, Opportunities & Barriers. *The 2nd Barcelona Conference on Education 2021 Official Conference Proceedings*. The International Academic Forum.

Wahl, D. C. (2016). *Designing Regenerative Cultures*. Axminster, England: Triarchy Press.

Wahl, D. C. (2020, September 2). 01 - Daniel Wahl, ¿cómo promover culturas regenerativas? *Cuando La Tierra Habla*. (R. Sistek, C. Pissarro, & M. de Rurange, Interviewers) Podcast Ladera Sur / Aldea Nativa.

Wahl, D. C. (2021). 1. Designing Regenerative Education || Daniel Christian Wahl. *The Regenerative Education Podcast*. (B. van den Berg, Interviewer)

Wittmayer, J., Loorbach, D. Bogner, K., Hendlin, Y., Hölscher, K., & Lavanga, M., Vasques, A., von Wirth, T., Wal, M. (2021). *Transformative Research: knowledge and action for just sustainability transitions. DIT Working paper for positioning transformative research*. Rotterdam, Design Impact Transition Platform, Erasmus University Rotterdam.

Ziegler, J. (2018). *Le capitalisme expliqué à ma petite-fille (en espérant qu'elle en verra la fin)*. Seuil.

Contact email: b.vandenberg@hhs.nl

Museum of Works as a Means of Improving Professional Knowledge of Senior High School Students Through Public Intervention

Joshua Alfando, University of Pelita Harapan, Indonesia
Felia Srinaga, University of Pelita Harapan, Indonesia
Undi Gunawan, University of Pelita Harapan, Indonesia

Abstract

Due to a shortage of technical skills, high school graduates make up 7.92 percent of unemployed Indonesians. This issue can be addressed by a "museum of work" that is immediately integrated into the high school community. This study's main purpose is to learn about various self-actualization techniques and public interventions, as well as the design aspects of a museum of works space and how to establish an exploratory museum of work. This study linked the museum's safe, engaging, and restorative environment (space) theories with the SMA (Senior High School) community's features. At the James Simon Museum and the Rio Arts Museum, researchers compared and contrasted the two collections. In addition to the museum's self-actualization area, the theoretical and precedent analysis produced 9 design concepts and solutions addressing building mass composition, spatial efficiency and integration with the high school community. The 1.03-hectare Immanuel Pontianak Christian High School property was designed as a museum of works. The study's conclusions led to the creation of a 7921 m2 museum masterpiece connected to Immanuel Christian High School Pontianak. The museum of work space program includes an Auditorium, Professional Exhibition Space, Courtyard Park, Museum Store, and Café. The eventual purpose of this museum of work design is to enlighten each student about the types of careers path they should take in the future.

Keywords: Museum of Works, Medium to Increase Professional Knowledge of High School Students, Public Interventions

iafor

The International Academic Forum
www.iafor.org

Introduction

According to a Ministry of Manpower report, persons with a high school graduation are the most unemployed. In 2019, the BPS reported 7.05 million unemployed Indonesians. High school educational institutions should be able to fulfill at least two major duties. This responsibility includes developing the student's personality through self-actualization and preparing them for the professional environment (Schutz, 1999). High school students are a population prone to self-actualization and exploration. High school students strive to develop their individuality in order to mature and pursue a mature/future career. They frequently express this through arts. It's a shame that these kids can't express their adventurous side in high school (Maress, 2018).

A museum is a public exhibition space for artists and scientists. As a result, a museum of work concept might be taught in high school. The museum of works exhibition facilities let high school students to present their work to the public. High school students can make works in any discipline, from art to medicine, for the museum of works (Hirzy & Services., 1996).

Aside from Sulawesi, Kalimantan has the second fewest museums in Indonesia. Kalimantan is an Indonesian island (Harsa, 2020). The local government has welcomed and supported the creative movement in Pontianak and other cities in Kalimantan to contribute to the island's economic success (Angah, 2019). Pontianak has 59 high schools, 37 private and 22 public. This ratio measures the public's willingness to send their kids to better private schools than public schools (supply and demand) (UMM, 2016). Immanuel Christian High School is the most popular and best private high school in the Ministry of Education and Culture's ranking of the best schools (Arjantoh, 2017). Extracurricular activities at Immanuel Christian High School are diverse and cross-cultural. These activities are not successfully accommodated at Immanuel Christian High School due to a lack of specialized work space. This study's purpose is to identify self-actualization activities for high school students, as well as public activities that can help students gain professional knowledge, and then to identify architectural design aspects of the work museum space that can facilitate student-public collaboration. A museum of works promotes the Pontianak Immanuel Christian High School's exploration of space.

Theoretical Reviews

Self-Actualization and Public Interventions in High School Environment

A high school student should be able to calculate profit and loss for a future career. This profit and loss is founded on motivation and guarantees on the future career (Conger, 1977).

Mary Ann claims in her journal "A Study of a Museum-School Partnership" that self-actualization activities are particularly effective when done in a work museum. Ensuring that school assignments are completed intuitively and creatively is a goal of the work museum container. The work museum can be used for activities in the performing arts, visual arts, and science research (Mary Ann Wojton, 2009). Nyoman Sudana explains in his article "Community Participation in the Implementation of Education" that social support from the community is an important factor that is not given enough emphasis in schools. Professionals have a high capacity for job experience. If this ability is shared with high school students, they will learn more about the realities of the workplace, which often contradict educational

assumptions. Professional workshops, counseling workshops, and seminars/socialization can all provide high school students with social support or Job Fair (Razak, 2013).

Museum of Works as a Safe Space, Engaging Space and Restorative Space

A museum must have three major spatial features to facilitate high school student-public collaboration: safe, engaging, and restorative. For example, a work museum can promote visitors' mental health, establish new work and activity spaces, foster a sense of attachment to the environment, foster debate over works, and critical reflection. Characters at the museum safe space work up the meaning of display categories (exhibition space) (Morse, 2020). As a result, the museum of work has a dynamic, acoustical, open, and appealing character (welcoming). The meaning of multi-functional space and auditorium in the museum of works is engaging space (Kristiansen & Harslof, 2015). Another important characteristic of a restorative place is its strong link with the surrounding environment, possibilities for relaxation, and high spatial coherence between spatial contexts with varied themes. The work museum's restorative space feature defines its overall spatial environment (Paris, 2002).

Architectural Elements of Museum of Works

Dexter argued in his book "The Manual of Museum Planning" that an art museum is a form of specialization museum that does not prioritize visitors' backgrounds. Rather, it's about extending visitors' (the public's) viewpoint on the artwork on display in the museum. Dexter further mentioned that the Karya Museum has various key functions for its spatial requirements, including collection, documentation, preservation, research, exhibition, and interpretation (Lord & Lord, 1999).

Museum of Works Characteristics	Space Elements	Shaper Elements
Safe Space	Exhibition Space, Exhibition Preparation, Exhibition Warehouse	Folded partition, Lifted Ceiling, Diffuse Lighting, Obyek Pameran
Engaging Space	Auditorium, Workshop Area, Multi-Functional Room, Public Hall, Terrace/Balcony, Creative Space, Lobby, Facade	*Hidden natural light, Ornament Fixture, Fabric Ceiling, Seating staircase, Opaque walls, Façade Setback*
Restorative Space	Museum of Works Circulations	*Ramp menerus, Semi-transparent partition, Divided Areas*
Ruang Pendukung	Toilet, Technical Room, Deliveries, Securities, Museum Shop, Janitor Room, Café/Restaurant, Cloak Room/ Locker, Administration Office, Pantry, Elevator	-

Table 1: Architectural Elements of Museum of Works. An Analysis based on: (Bernardes, 2014); (Chipperfield, 2018); (Fiederer, 2016); (Kiser, 2016); (Taylor-Foster & Brittain-Catlin, 2017).

Museum of Works Integration in The High School Environment

Renzo Piano presents his notion of Museum Expansion at Harvard, Boston, Los Angeles, and Atlanta in his portfolio of projects named Renzo Piano Building Workshop. Several factors are mentioned in the discussion that might be utilized as a guide when merging the museum's typology with the current building's typology (RPBW, 2013). These criteria include accommodating the need for natural lighting in the gallery, maintaining the need for adequate air circulation, giving the impression of repetition of the old building, not disrupting or eliminating existing activity programs, becoming a new focal point for public arrivals, and having a piazza in the connection between new and old buildings.

School Building Type	Schematic Plan	Proportion	Number of Classrooms	Number of Stories	Orientation	Window to Wall Ratio	Room Depth (m)
Rectangle shape		36%	12–107	3–6	S/E/W/N/SE	20–90%	6.0–11.0
L shape		12%	12–81	3–6	S/W/E/NW	20–60%	6.5–10.5
C shape		20%	6–133	3–6	S/W/E/SW	20–70%	6.0–12.5
H shape		5%	23–90	4–6	S/SW	20–80%	5.0–9.0
H shape with an atrium		1%	18–24	4–6	S	20–30%	6.0–8.0
Courtyard		11%	12–90	2–6	S/W/E/SE	30–80%	5.5–11.0
High-rise		2%	20–81	7–10	S/E	20–40%	7.5–9.5
Irregular shape	-	14%	12–114	2–6	S/E/SE	20–70%	6.5–10.0

Table 2: High School Building Typologies

Source: (Zhang et al., 2017)
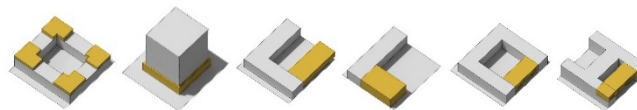
Figure 1: Typology Integration Scheme (1. Open Plan + Rectangle Shape; 2. Open Plan + C Shape; 3. Centralized & Spread + H Shape; 4. Cluster + Courtyard; 5. Centralized + Highrise; 6. Open Plan + L Shape (Sumber: Authors' Analysis)

Research Methods

The James Simon Museum and the Rio Arts Museum's past studies, site location analysis, and a questionnaire survey were utilized in this study to evaluate the forms of self-actualization activities and appropriate treatments applied to the site.

Precedent Studies

The James Simon Museum (2018) and the Rio Arts Museum (2018) are two precedent studies that will be studied in this research (2014). The goal of this case research is to examine the outcomes of implementing direct integration between the mass of the museum building and the mass of other structures. The mass of the James Simon Museum building acts as a revival of the museum's function, as it combines with the ancient museum building. The Rio Arts museum, on the other hand, is the outcome of the integration/unification of two distinct building purposes, contrasting and modifying the functions of the palace and the police station. Internally, the palace was converted into a museum building, with the outer facade remaining the same as before, while the police station was remodeled into a local school building. The two structures are linked by a suspension bridge that runs down the rear of each. The architect David Chipperfield designed the James Simon Museum, while

Bernardes + Jacobsen Arquitetura designed the Rio Arts Museum (Chipperfield, 2018) (Bernardes, 2014).

Study Category	James Simon Museum	Rio Arts Museum
Location and Scale	Located in an existing historic location and has a horizontal longitudinal scale dominance (explorative)	Located in an existing historic location and has a vertical scale dominance (intimidation)
Circulations	Explorative Circulations	Explorative Circulations
Room Programming	Room Program with facility function dominance	Exhibition function-oriented space program
Room's Facilities and Features	*Parking space, elevator, foyer, auditorium, temporal exhibition space, mezzanine, café, information area.*	*Lobby, social corner, elevator, multifunctional room, public hall, auditorium, workshop areas, exhibition space, temporary exhibition space, sculptures area, café, skybridge*
Lighting	Adequate quality of natural lighting	Lack of attention to the quality of natural lighting
Integration with Surrounding Environment	The mass of the building is integrated through the mass of the museum building itself	Massa bangunan terintegrasu dengan ketersediaan ekspansi sirkulasi jembatan.
Structural Elements	Using a bored pile foundation, and the spacing of the beams becomes a lattice for the entry of natural light.	Using a combination structure system of elevator core and concrete column.
Room Capacity Based on Type and Functions	*Temporary Exhibition Space (2%-15%), Exhibition Space (20%), Exhibition Preparation (0,15%), Exhibition Warehouse (0,35%), Toilet (0,2%-1,2%), Cloakroom/Locker (0,3%-2%), Deliveries (0,7%), Ticketing/Lobby(1%-2,5%), Museum Shops (5%), Auditorium (1,2%-4,75%), Terrace/Balcony (5,86%), Café/Restaurant (2,3%-3%), Pantry (0,2%), Elevator (0,3%-0,4%), Workshop Areas (1,4%), Public Hall (0,5%)*	
Facade	38% Void, 62% Solid	50% Void, 50%Solid
Circulations character	Tilted hidden turn, perimeter turn, progressive scaling in between, perpendicular turn, meeting point, directional turn, core service, checkpoint service, technical clusters	
Material	Warm materials, sound insulation materials, cold&hard materials, local stone materials	

Table 3: Precedent Study Results
Source: Based on analysis from: (Bernardes, 2014); (Chipperfield, 2018)

Site Analysis

The site is located on Lieutenant General Sutoyo's major route, Jalan Gajahmada Pontianak Kota, which is 1.23 kilometers southwest of the city center. The property also connects with the Pontianak regional city plan's "projection zone for commercial and tourism districts." The percentage of KDBs in the area is 70-80 percent (BAPPENAS, 2002). The existence of the function of the mass of work museum building can help to support the cultural and tourism sector's urban planning projections.

Kategori Analisa	Hasil Analisa
Accesibilty	Has 2 main road hierarchy that contrast to each other
Horizontal-Vertical Connection	Linear/continue the access horizontaly
Activities type	Administrative activities, High school flag ceremony, cafetaria, Small shops, Housing.
Building Type	Low rise 2-3 level
Neighborhood Programs	Dominated by government offices
Neighborhood Density	Apart/loose
Site's View Axis	Tend to have a beautiful atmosphere and adequate infrastructure
Environment Shadow	The site is not too covered by the shadow of the surrounding buildings.

Table 4: Site Analysis Results

Source: Authors' analysis

Questionnaire Survey

There were 61 respondents from high school students who responded to a survey that was performed utilizing the questionnaire distribution method. The purpose of this survey was to learn about people's opinions on the importance of self-actualization activities and profession knowledge in high school, as well as what kinds of activities can be done to realize self-actualization activities in high school and what kinds of activities can be done to distribute knowledge in the professional world. The results of the survey, which were acquired from 65 people, are provided in the following table:

Self-Actualization Activities in High School Environment	Extracurricular, Produce painting, Participate in Student Council, Participate in Scouting, Outbound, Participate in Pensi activities, Drama Performance, Cooking, Sports(Badminton, Futsal), Fashion Arts, Painting, Performing Arts, Photography, Part Time Work in Computer Stores .
Types of Profession Expected to be introduced in the High School Environment	Entrepreneur, Tourism, Linguist, Teacher, Medicine, Programming, Technician, *Architecture, Presenter, Chef*, Artist, Accountant, Comic, Voice Acting, Radio Broadcaster, Law.
Forms of Distributing Professional	Seminar, Industry Socialization, Teacher Guidance, *Pre-College*, Workshop, Internship, Counselling Workshop, Ekstrakulikuler, *Job Expo, Job Fair*.

Knowledge Techniques in the High School Environment	

Table 5: Quetionnaire Survey Results

Source: Authors' analysis

Results

The design process for the museum of works will be carried out in several stages, based on the results of learning the theories of the museum of works that have the characteristics of safe space, engaging space, and restorative space, then learning and analyzing the precedent studies James Simon Museum and Rio Arts Museum, as well as site analysis and questionnaire surveys. The research of mass composition comes first, followed by site planning and programming of space functions and characteristics.

Massing Explorations

The process of investigating the composition of the mass of the museum of works building begins with a consideration of the structure of the mass of the building's function, which includes safe space, engaging space, and restorative space. After that, you should align the accessibility of the surrounding surroundings. This alignment is achieved by combining the work of museum's internal and outdoor circulation patterns, allowing for flexibility in both the outer and inner areas. The mass exploration process is then carried out by taking into account the lighting circumstances at the location by installing a skylight doorway that allows natural indirect illumination to enter.
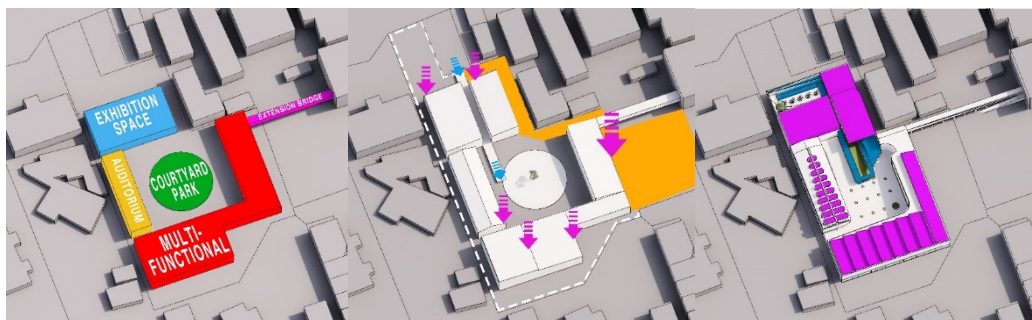
Figure 2: Museum of Works' Building Mass Design Explorations

Source: Joshua Alfando's Explorations

Site Planning

In general, the circulation established in the work museum setting is the result of a firm perimeter element around it that focuses visitors to the museum of work's internal events. There is also an additional parking lot to accommodate the capacity of new automobiles brought in by visitors to the museum of works.

Figure 3: Immanuel Christian High School's Museum Site Plan
Source: Joshua Alfando's Explorations

Museum of Works' Room Programming and Features

There are numerous essential characteristics to this museum of work's design. The progressive spatial transition from the works museum's entrance to the content of the works museum's program space is the first feature. This transition attempts to gradually unveil the contents of the works museum in order to stimulate visitor interest and participation.
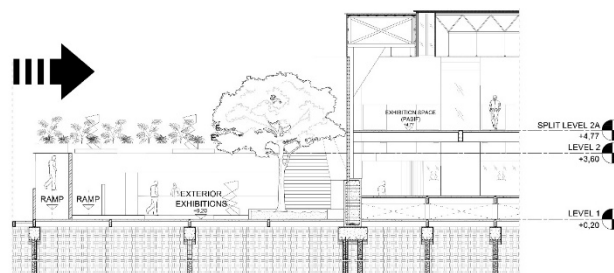
Figure 4: Exhibition Space Detailed Section
Source: Joshua Alfando's Explorations

The feature extension bridge, which connects the Immanuel Christian High School room to the museum of works space spatially, has these following features. This bridge has LED flashing lights that guide tourists from the high school entrance to the art museum. In addition, there is a circular feature gate that depicts the exhibition space's orientation of spatial openness. Then there's the open space mezzanine, which highlights the depth of the exhibition room's mood.

Figure 5: Museum of Works Building Features (1. Extension Bridge, 2. Circular Gate; 3. Open Space Mezzanine)
Source: Joshua Alfando's Design

This museum of works is divided into two stories, with the first floor dominated by a professional office and the second floor housing professional display activities. The function display space, which occupies 40% of the floor area on the second floor, dominates the floor area. With the use of voids in particular areas it seeks to present a greater perception of depth of fields.
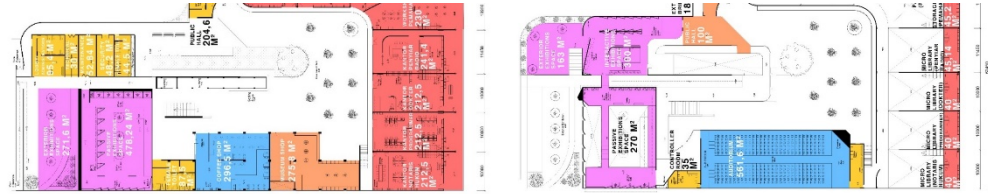
Figure 6: Museum of Works Capacities

Source: Joshua Alfando's Design

Conclusions

Several architectural aspects of the "Museum of Works" contribute to the creation of an adventurous spatial ambiance. Opaque walls, sliding frames, indirect natural lighting, open plan circulations, welcoming facades, sliding frames, and ramp circulations are among the architectural elements. The availability of parking space facilities, elevators (optional), foyer, auditorium, temporal and permanent exhibition space, mezzanine, café, information area, social corner, sculptures area, multi-functional room, and skybridge were then added as learning outcomes from the James Simon Museum and Rio Arts Museum precedent studies. The design of the museum works was also applied to the site environment of the Pontianak Immanuel Christian High School based on the learning results of these architectural features.

The Museum of Works at Pontianak Immanuel Christian High School has a total floor area of 7921 m2 and a footprint of 4,509 m2. An auditorium, outside exhibition space, passive exhibition space, interactive exhibition space, café, professional exhibition room, mural walls, climbing walls, balcony, lobby, mezzanine, and museum shop are all available at this museum. The principal activity mechanism in this museum is a mutualistic symbiotic cycle. This arrangement allows members of the public, such as professionals, to rent an office at the Immanuel Christian High School's museum for a reasonable fee in exchange for providing periodic seminars and intern programmes to high school students based on their different professional specialties as a donation to the school. At addition, Immanuel High School students have the opportunity to perform an internship in one of the museum's newly opened offices. Immanuel Christian High School students will gain more professional knowledge as a result of the opportunity to test out a true professional simulation in a setting that is extremely close to and directly related to the high school environment. Several types of professional activities that take place at the works museum can also result in physical products/works such as comics, sculptures, paintings, games, and architectural mockups that can be displayed in the Immanuel Christian High School Pontianak's exterior, passive, and interactive exhibition halls. Finally, the outcomes of this research are the results of Immanuel Christian High School Pontianak's museum design. Of course, this research isn't flawless and doesn't include all aspect required for design; as a result, the authors hope that this research can be used in other studies that require similar references.

Acknowledgements

References

Angah. (2019). BPS: Ada 110.272 Pengangguran di Kalbar | Ekonomi. Retrieved January 30, 2021, from https://www.gatra.com/detail/news/455260/ekonomi/bpsada-110272 pengangguran-di-kalbar.

Arjantoh, L. (2017). SMA terbaik di Indonesia - Daftar SMA terbaik versi Kemendikbud | the Asian parent Indonesia. Retrieved January 30, 2021, from https://id.theasianparent.com/daftar-sma-terbaik-di-indonesia-versi-kemendikbud-2015

Bernardes, J. (2014). MAR – Rio Art Museum / Bernardes + Jacobsen Arquitetura | ArchDaily. Retrieved November 10, 2020, from https://www.archdaily.com/358695/mar-nil-rio-art-museum-bernardes-jacobsen-arquitetura.

Chipperfield, D. (2018). James Simon Galerie / David Chipperfield Architects | ArchDaily. Retrieved November 10, 2020, from https://www.archdaily.com/926033/james-simon-galerie-david-chipperfield-architects

Conger, J. J. (1977). *Adolescence and youth : psychological development in a changing world*. New York: Harper & Row.

Fiederer, L. (2016). *AD Classics: Kiasma Museum of Contemporary Art*. Retrieved from https://www.archdaily.com/784993/ad-classics-kiasma-museum-of-contemporary-art-steven-holl-architects

Harsa, A. N. (2020). Jelajah Skena: Kalimantan - Whiteboard Journal. Retrieved January 30, 2021, from https://www.whiteboardjournal.com/ideas/art/jelajah-skena-kalimantan/

Hirzy, E. C., & Services., I. of M. (1996). *True needs, true partners : museums and schools transforming education*. Washington, DC (1100 Pennsylvania Ave., NW, Washington 20506): Institute of Museum Services. Retrieved from http://catalog.hathitrust.org/api/volumes/oclc/36162168.html

Kiser, K. (2016). HEART – Herning Museum of Contemporary Art. In *Museum Buildings* (pp. 136–141). https://doi.org/10.11129/9783955532963-015

Kristiansen, E., & Harslof, O. (2015). *Engaging spaces : sites of performance, interaction and reflection*. Kbh.: Museum Tusculanum Press.

Maress, B. (2018). Perkembangan Psikologi Pada Masa Sekolah - DosenPsikologi.com. Retrieved September 16, 2020, from https://dosenpsikologi.com/perkembangan-psikologi-pada-masa-sekolah

Mary Ann Wojton, M. S. (2009). *A STUDY OF A MUSEUM-SCHOOL PARTNERSHIP*.

Morse, N. (2020). *The Museum As a Space of Social Care*. Milton: Taylor & Francis Group. Retrieved from http://public.eblib.com/choice/PublicFullRecord.aspx?p=6348608

Paris, S. G. (2002). *Perspectives on object-centered learning in museums*. Mahwah, N.J.; London: Lawrence Erlbaum Associates.

Schutz, A. (1999). Creating local "public spaces" in schools: Insights from hannah arendt and maxine greene. *Curriculum Inquiry*, *29*(1), 77–98. https://doi.org/10.1111/0362-6784.00114

SKI. (2017). SMA Kristen IMMANUEL | Sekolah Kristen Immanuel. Retrieved January 30, 2021, from https://ski.sch.id/new/sma-kristen-immanuel/

Taylor-Foster, J., & Brittain-Catlin, T. (2017). The Broad Museum / Diller Scofidio + Renfro. Retrieved October 13, 2020, from https://www.archdaily.com/772778/the-broad-diller-scofidio-plus-renfro

Razak, A. R. (2013). Peran Serta Masyarakat Dalam Pendidikan. *Otoritas*, *2*(1), 179–188.

UMM. (2016). Data SMA dan SMK Kota Pontianak | Universitas Muhammadiyah Malang. Retrieved January 30, 2021, from http://www.umm.ac.id/id/pages/kalimantan-barat/data-sma-dan-smk-kota-pontianak.html

Zhang, A., Bokel, R., van den Dobbelsteen, A., Sun, Y., Huang, Q., & Zhang, Q. (2017). The effect of geometry parameters on energy and thermal performance of school buildings in cold climates of China. *Sustainability (Switzerland)*, *9*(10). https://doi.org/10.3390/su9101708

Contact email: felia.srinaga@uph.edu

MMORPG Games as a Way of Coping During the Pandemic: A Study on World of Warcraft

Rengin Gürel, Istanbul Technical University, Turkey

Abstract

Negative effects of coronavirus expand from physical to mental health, thus finding methods for coping and wellness has become crucial. The act of play is a way to improve one's wellness and it has been discussed as an intrinsic human activity nested in the culture. During quarantines "play" was in the virtual form more than ever. These games, including MMORPGs (massively multiplayer online role-playing games), offer an achievement-based social experience. Before the pandemic, these games have been discussed in terms of their negative aspects such as being an escape from reality, an unhealthy coping mechanism, and an addiction. Contrarily, some researchers consider this activity as a facilitator of social interaction with existing or new social networks. In this study, World of Warcraft (WoW) is explored as a setting through an ethnographic approach to understand how the covid pandemic affected players and their experience in the virtual world. The paper focuses on the levelling stage of the game and fieldwork data derived through participant observation and casual conversations with players. Collected data suggests playing WoW has become a method for coping against the pandemic. This research examines Man, The Player in World of Warcraft. Understanding a virtual world could unfold ways to build resilience in the "real world". The paper argues that playing WoW could become a tool for better coping with the pandemic through its competition, chance, and simulation elements that create achievement-based, social, and nostalgic motivators in the game.

Keywords: MMORPG, Play, Emotional Coping, Ethnography

iafor

The International Academic Forum
www.iafor.org

Introduction

Coronavirus pandemic has affected people negatively on a physical and mental level, and World Health Organization (2021a) warns people against the main effects of COVID-19 pandemic on mental health: higher levels of stress and anxiety. Moreover, The WHO (2021a) is concerned about the effects of quarantine and its impact on people's everyday routines that could lead to increased levels of loneliness, depression and, more. Consequently, coping methods and mental wellness have become more important. Play is an intrinsic human activity that is closely related with the culture (Huizinga, 1971) and it is meaningful in adult life since it enhances the developmental process throughout the lifetime, and contributes to mental wellness (Whitaker & Tonkin, 2016). Since the WHO (2021b) advises to stay home and self-isolate during the pandemic, countries took serious precautions including quarantines and social distancing regulations, the act of play has been in the virtual form more than ever.

In this study, playing in a virtual world (World of Warcraft) is explored as a way of coping during the pandemic. WoW (short for World of Warcraft) is a massively multiplayer role-playing game (in short MMORPG) released by Blizzard Entertainment. This paper discusses WoW as a tool for coping with the pandemic through its competition, chance, and simulation elements that create achievement-based, social, and nostalgic motivators in the game.

Human, Virtual Play and the Pandemic

Play, whether it is in a physical or virtual form, is an intrinsic human activity. Huizinga (1971) defines the act of play as follows:
... play is a voluntary activity or occupation executed within certain fixed limits of time and place, according to rules freely accepted but absolutely binding, having its aim in itself and accompanied by a feeling of tension, joy and the consciousness that it is 'different' from 'ordinary life'. Thus defined, the concept seemed capable of embracing everything we call 'play' in animals, children and grown-ups: games of strength and skill, inventing games, guessing games, games of chance, exhibitions and performances of all kinds. We ventured to call the category 'play' one of the most fundamental in life." (as cited in Caillois, 1961, p. 177)

Play is regarded as a fundamental aspect of life and can be in close relation with people's well-being. On the other hand, play in a physical sense is not the only type of play that influences wellbeing. Playing in digital mediums such as video games and virtual worlds is also shown to be improving wellness. Snodgrass et al. (2013) assert:

Our research shares much in common with previous studies of problematic Internet use, but shows how attention to shared cultural patterns of thought and practice can refine our understanding of players' abilities to immerse themselves healthfully, rather than problematically, in WoW. (p. 253).

Playing video games can have a positive impact on players' well-being. In their review paper, Johnson et al. (2013) find that video games have a positive effect on young people's wellness, and "existing research suggests that video games contribute to young people's emotional, social and psychological wellbeing." (p. 5). Although, research shows the excessive play of video games can display "mild increases in problematic behaviours" (Allahverdipour et al., 2010). Regarding how often and when the games are played, research finds that "in term of the impact of videogame play on wellbeing, what you play and how

much you play are not as important as who you play with and whether you experience relatedness and flow while playing" (Vella et al., 2013, p. 102).

Coping consists of the efforts to deal with a threatening or harmful situation, either to remove the threat or to diminish how it can have a big impact on the person (Carver, 2010). Video games are also effective in terms of players' emotional stability and coping. On the other hand, "moderate video gameplay can contribute to positive emotions" (Przybylski et al. 2009) and emotional stability (Przybylski et al., 2011). Moreover, playing video games moderately may provide a healthy beginning of "socialisation, relaxation, and coping", and "combating stress" (Wack & Tentelett-Dunn, 2009; Snodgrass, Lacy, Dengah, & Fagan; 2011; Snodgrass, Lacy, Dengah, Fagan & Most 2011).

Other than its effect on wellbeing, video games are shown to influence the resilience of players. Tichon & Mavin (2016) suggest that video games that encourage players to constantly defeat hardships, by failing and trying again, could influence the behaviour outside of the game (p.2). Moreover, researchers argue, video games could be training their players to have better resilience, since its approach to increasing difficulty step by step is similar to computer-based resilience training (Driskell & Johnston, 1998, as cited in Tichon & Mavin, 2016).

Various video games include "virtual worlds" defined as:
... we describe virtual worlds as possessing the following characteristics. First, they are places and have a sense of worldness. They … offer an object-rich environment that participants can traverse and with which they can interact. Second, … (they) are multi-user in nature; they exist as shared social environments with synchronous communication and interaction. … participants may engage in solitary activities within them, virtual worlds thrive through co-inhabitation with others. Third, they are persistent: they continue to exist in some form even as participants log off. They can thus change while any one participant is absent, based on the platform itself or the activities of other participants. Fourth, virtual worlds allow participants to embody themselves, usually as avatars … such that they can explore and participate in the virtual world. (Boellstorff et al., 2012, p. 7)

Games in the form of virtual worlds are important for research since they create a setting and a community, governed by its social traits. Therefore, MMORPGs become a research topic by standing out with their socialising game mechanics, communities, and immersive environments.

Existing research on these games focus on both negative and positive impacts of gaming in virtual worlds. Research on these games focuses on recognizing the negative aspects of MMORPG game-play and researchers discuss it as an escape from reality (Yee, 2006b; Deleuze et al., 2019; Kirby et al, 2014), an unhealthy coping mechanism (Blasi, 2019), and addiction (Hussain & Griffiths, 2009; Kirby et al, 2014). On the other hand, the positive effects of online games are shown through research. MMORPGs and its gameplay as a facilitator of social interaction with existing and new social networks (Nardi & Harris, 2006).

Methodology

Since games are introduced and their communities are formed, researchers became interested in them as virtual settings. Boelstroff et al. (2012) discussed a close relationship between virtual worlds and ethnography in their handbook, guiding a way for future studies in this

area. In this study, the term "virtual world" (Nardi, 2010) will be used to refer to settings like World of Warcraft. Nardi (2010) claims these settings have participants with simulated characters that can travel in tri-dimensional space and they sustain communication with other people when obtaining various digital objects. Virtual worlds are rich in terms of social interactions and actions they provide for the "players". Therefore, these worlds are suitable settings for ethnographic research.

In the context of this paper, the setting of WoW is explored as a way of coping during the pandemic. Ethnographic methods allow a deeper understanding of social structures and behaviours. Even when the setting is virtual, various researchers showed that studies of "virtual ethnography" are possible and valuable (Hine, 2000; Boellstorff et al., 2012). This study is an ethnographic account of the online multiplayer game World of Warcraft. Other than being a game, this platform is a world with a community with its social constructs.

Ethnography is "thick description" (Geertz, 1973), meaning that it is layered. Hence this study aims to unfold the layers within World of Warcraft communities. To become a participant-observer, a researcher in WoW needs to be a "player", to understand the game mechanics and community, also to become a participant. In this paper data collection was done through participant observation, in-site, and our-site conversations with players. All of the guild and player names are changed to keep informants anonymous.

The Study

Virtual worlds and communities have been a part of our lives for decades now and they have been acknowledged with their potential for scientific (Bainbridge, 2007) and ethnographic research (Boelstroff et al., 2012). Many online games include the concept of "war" in their worlds, such as Everquest, Guild Wars, and World of Warcraft. World of Warcraft, one of the rich virtual worlds of today, has been around since 2004 and it is still very active. It is an online massively multiplayer role-playing game (MMORPG) launched by Blizzard Entertainment. Millions of people can be online and be involved in massively multiplayer games. World of Warcraft is one of the pieces of the Warcraft franchise which consists of Warcraft: Orcs & Humans, Warcraft 2: Tides of Darkness, and Warcraft 3: Reign of Chaos (The Editors of Encyclopaedia Britannica, 2021). A lot of old players come and play again multiple times, and explore this world with a rich story (lore, as gaming communities call it) filled with magic, war, and survival. World of Warcraft has created a long-lasting community by having its story and social interactions at the core of its design. Nardi & Harris (2006) argues: "The design of World of Warcraft and the player culture that has developed within the game provide an innovative space in which strangers collaborate and can become friends." (p.158). Virtual worlds like WoW have a strong impact on their players since taking part in them could "positively contribute towards an individual's identity realisation, sense of community, privacy, and belonging" (Ramshaw, 2020, p. 23). Therefore, WoW becomes a rich setting for research with its social aspects.

Research on MMORPGs show that these games affect their players in both positive and negative ways. The study conducted by Hussain and Griffiths (2009) that revealed that players show playing MMORPGs as a cause of their issues. The study also shows that playing MMORPGs is a way to relieve feelings of negativity (Hussain & Griffiths, 2009). In terms of the social aspects that affect MMORPG players, Weissman (2017) examined how the players of MMORPGs relate to their real and virtual worlds on a social level and he highlights the feeling of "connectedness" that occurs in MMORPGs. His study indicates that

the players who look for collaborative gameplay will feel more connected to others (2017, p. 80) and people felt even more connected when they spent more time in the game (p. 81).

Various researchers studied World of Warcraft in terms of its digital culture, play, and identity; collaborative work and play in the game; race and learning in WoW, coordinated action in the game (Corneliussen & Rettberg, 2008; Sherlock, 2009; Weiss & Tettegah, 2012; Williams & Kirschner, 2012). Bonnie Nardi (2010) approached the game as an ethnographic field and studied the game as an active aesthetic experience and explored the game's cultural logic. Nardi's work (2010) included the addiction aspect, theorycraft, and mods of the game, issues of gender in the game, and comparative studies of WoW culture in China and the United States.

Figure 1: Interface of the Game (World of Warcraft, 2008)

Even though it is only on a monitor, the curated environment of WoW creates a rich involvement with the game and its virtual world through its graphics, sound effects, and ambiance music. Its races and stories are inspired by real-life, fiction, Lord of The Rings trilogy (Tolkien, 1954), and the game Dungeons and Dragons (2014). The interface of the game includes the environment (that you can interact with), a chat box to communicate with others through text and emotes (simple animations which work as gestures such as laugh, blow a kiss, bow, wave, cry, etc.), bags to carry objects in the game (potions, food, drinks, weapons, etc.), skill slots, the character window to see the stats (a piece of data that represents attributes of the character) and equipment, a "social" tab to find people to collaborate with and a map to find your way around the game.

The game has two main stages: levelling and endgame. Levelling means simply "levelling up" until the endgame. During the levelling stage players explore the world, complete quests (individually and with groups) and go to dungeons. In the endgame stage, players reach the level cap so they do not worry about levelling anymore, but as some of the players say "this is where it begins". During this stage players mainly do raids, play PvE (player vs. environment) or PvP (player vs player), do role-playing and more. These two stages of the game differ in terms of the actions they require and the motives and dependencies players

have. Hence, I argue that the behaviour models of the players change according to their stage in the game.

During the levelling stage, players are less dependent on each other. Even though WoW is designed in a way to keep their players interacting for a common goal (completing a quest/dungeon/raid), the levelling stage can be completed for the most part on one's own. Although, it can be done quicker with other players by finishing quests faster, or by getting help from higher levelled players. Some players use their other higher-level characters to "power level" their weaker characters.

During the endgame, players become more dependent on each other due to the game mechanics. During the endgame, raiding (fighting against the strongest opponents in the game's world) is done with parties that range between 5-40 people and it can not be done alone. Moreover, raids are a big part of the endgame and they require lots of interaction to strategize and become coordinated to be successful. Therefore, during the endgame players need to interact with each other more than they need during the levelling stage.

World of Warcraft as Play

Caillois (1961) defines play with the following elements:
1. Free: in which playing is not obligatory; if it were, it would at once lose its attractive and joyous quality as diversion;
2. Separate: circumscribed within limits of space and time, defined and fixed in advance;
3. Uncertain: the course of which cannot be determined, nor the result attained beforehand, and some latitude for innovations being left to the player's initiative;
4. Unproductive: creating neither goods, nor wealth, nor new elements of any kind; and, except for the exchange of property among the players, ending in a situation identical to that prevailing at the beginning of the game;
5. Governed by rules: under conventions that suspend ordinary laws, and for the moment establish new legislation, which alone counts;
6. Make-believe: accompanied by a special awareness of a second reality or of a free unreality, as against real life. (p. 9-10)

MMORPGs, and therefore the World of Warcraft, can be examined with these elements. Firstly, MMORPGs are free: meaning playing is not obligatory. Although during the endgame, raiding becomes a big part of the game and it needs the effort to plan and perform it. Serious players and guilds expect their "guildies" (members of the same guild) to be prepared, on time for the raids to become successful as a group. This aspect makes MMORPG game-play less "free" and puts it in a place between "free" and "obligatory".

Secondly, MMORPGs are even more Separate than the traditional games we play in the physical world, such as chess and checkers. In chess, the players are separated from their daily life and they act according to the game's rules. Similarly, MMORPGs separate their players with their rules. Moreover, in these games the player is separated from the physical world, and s/he "lives" and "acts" in the game's fictional world. These virtual worlds have their races, environments, periods, and players have their fictional names and avatars as representations. Also, players "roleplay", act as their chosen characters during the game-play, which makes them more immersed and the game itself becomes more separate.

Thirdly, being uncertain: how the game and "journey" will play out? it is up to the player and there is room for exploration in MMORPGs. The game you will play will be different if you choose to play with a "paladin" character rather than a "warlock". Even though the game has a roadmap and tasks to carry out, it is open to exploration and creativity. There is no "one way" of playing it.

Being unproductive is not always the case for MMORPGs since some of these games have economies that became connected to "real life" with the exchange of character profiles for real money.

MMORPGs have worlds built within themselves and these worlds are governed by their own rules. These include rules of the gameplay and unwritten social rules among players. Rules of the gameplay (meaning game mechanics) regulate and guide the player's actions and the game's response to them. Finally, the element of make-believe, is very prominent in these games since they are based on role-playing and players assume the roles of characters in their fictional setting.

Classification of the play made by Caillois (1961) includes: agon, alea, mimicry, and ilinx. This classification can guide a way to understand WoW's game mechanics. It can be argued that MMORPGs have almost all of these categories within themselves.

Firstly, agon, being related to competition, is prominent in the play in WoW. In this game, players compete with the environment meaning Player versus Environment (PvE) and they have competition with other players meaning Player versus Player (PvP). Secondly, alea is related to chance. The element of chance is present in WoW since a roll of the dice decides on awards. Mimicry, is included through the role play aspect of the game. Lastly, Ilinx is not directly related to the experience in WoW. But this is through the use of Augmented Reality and Virtual Reality adaptations.

Interacting in the World of Warcraft

There are various ways that a player can interact with one another in WoW. Most of these types of interactions come from design decisions and the limitations of the game. And some of them are the creative ways players choose to use. In a broad sense, a player can make gestures, use the chat function to "talk" or act in various ways to interact.

Gestures

Similar to a physical setting, the virtual setting of WoW allows its players to make gestures to interact with each other. Essentially, gestures are texts that work as commands to make the avatars move in certain ways. Gestures are called "emote" in MMORPGs, which means expressing emotion (WoW Wiki-archive, 2021).

Emotes are also used to react to people and occurrences. When you finish a group quest or a dungeon with your party (small temporary groups formed to do group quests or dungeons) you might "/cheer". Or when your mate from the party levels up during a dungeon you might "/cheer for him/her". When you make a mistake or something bad happens to you, your mate might "/cry". If there is a competitive player they might "/spit" on you and request a duel.

Types of Chatting

Chat-box is one of the most important elements of the World of Warcraft interface. Through chatting you can "talk", "yell", "whisper" to other people, make gestures, recruit party or guild members, ask questions and make jokes. In this section, I try to explain how chatting works in different forms. You can talk, shout, whisper, write to the party chat, guild chat, or world chat. These ways of chatting are about who can read your messages.

Say: When you say things, your words are visible to the close-by people. For example, when you go next to someone and write to the chat "Hello!" they will see that in their chat-box and on the top of your head as a bubble. When you say things to another person who is passing by close to you can also see your message.

Yell: This is when you raise your voice and people further away from you can see your messages. It could be also used in roleplay when you yell something encouraging to your friends.

Whisper: As apparent from the name, whispering involves only two people. It is a form of direct message you can use with everyone online. Contrasting with whispering in real life, this form of chatting does not require you to be close to one another.

Party Chat: When people establish a party (2-5 people, one of them becomes the leader) to complete a quest or dungeon they have their chat and they can talk over there without anyone else seeing what they talk about.

Guild Chat: Similar to party chat, guild chat is for only that guild's members. And members can communicate from wherever they are. Even when your character dies you can still write to your guild's chat.

World Chat: World chat is the most comprehensive version of chatting in the game. It has multiple channels that you can join and write down your message. There are four channels and they are used according to the needs of the players such as general, trade, local defence, and looking for groups.

Acts

Other than using emotes and saying things in the chat-box, there are various acts, certain behavioural patterns that occur in the gameplay. Some of these acts include the gestures or chats that I explained earlier. Understanding these behaviours was sometimes easy whereas other times I needed more information about the game and community. When I could not understand why something happened, I asked the players I interacted with or looked to forums for answers. Some of my misunderstandings and confusions were resolved after I reread my fieldnotes. The more I played the more I was able to understand reasons for acts.

World of Warcraft as a Way of Coping

This ethnographic study, started on April 2020 in the beginning of the pandemic, is conducted in World of Warcraft. And fieldwork data was collected through participant observation and conversations with players. Participant observation is described as: "observing the activities of people, the physical characteristics of the social situation, and

what it feels like to be part of the scene" (Spradley, 1980, p.33). In the context of WoW, this translates to "feeling like to be part of the game". To research this virtual world, the researcher needs to become familiar with it. Figuring out the game, its story, and mechanics is crucial to understanding player behaviour. Moreover, the researcher needs to play the game well to become a part of the game's community and to make sense of what is happening in the setting.

COVID-19 pandemic affected society in a major way, changing the way we work and socialise. Many countries started regulations for quarantines and made stay-at-home orders. This climate of change has potentially affected the way people "play" as well. Participant observation showed the players of WoW came back to the game after many years of not playing. Pandemic and its stay-at-home orders seem to have encouraged old players to come back to World of Warcraft.

[Guild] [Okm]: btw did you guys play more WoW during covid? i mean i started during lockdowns soo :D
[Guild] [Tnl]: me 2
[Guild] [Obn]: same
[Guild] [Tnl]: havent played like 15 years before that
...
[Guild] [Obn]: not that long ago for me i played panda like 5 years ago
...
[Guild] [Tnl]: well its a way to do something and still be social i guess

When I talked with the members of my guild, they shared that they started the game again after many years due to the pandemic. Their motivations seemed to be around the motivations of "achievement" and "sociability" (Yee, 2006a).

As my fieldnotes suggest, players have a debate around the topic of "playing alone vs. playing with others". Although the game mechanics of WoW complement a socialising attitude, some of the players choose to play alone.

[Guild] [Okm]: that's actually why I tried to find people while leveling. Thought it would be more fun to play endgame with the people you know
[Guild] [Mrn]: yeah that's my opinion also
[Guild] [Mrn]: way more fun to play with other people most of the time
...
[Guild] [Mrn]: you're playing the wrong game if you want to play alone
[Guild] [Vrs]: no
[Guild] [Vrs]: you can play like you like
[Guild] [Mrn]: sure
[Guild] [Mrn]: but so much of this game is impossible to get to without a group or at least very hard
[Guild] [Mrn]: dungeons raids battlegrounds
…
[Ad] whispers: ... some do enjoy playing alone more (while questing)
[Ad] whispers: And the same goes for people in guilds actually, like you see that some people barely or never speak in the guild chat

As my guild master explains, "lone-wolf players" are not very active in the guild chat.

This could be related to the different motivations they have. "Achievement" could be the main motivation for the players that prefer to play alone, and "sociability" is the main motivation of other players (Yee, 2006a).

[Ad] [whispers]: ... it can be difficult finding people to quest with
[Ad] [whispers]: As for myself, i've always enjoyed questing together with someone, not because it's easier or anything like that. But because I enjoy company

In the case of Ad, her main motivation is "sociability" since she plays with others so they can have interaction, rather than for "achievement"-related reasons such as levelling up faster. Whether a player chooses to play alone or with other players, they are satisfying a motivation. These motivations tie players to the game during the pandemic as well.

Other than being a game-world, World of Warcraft creates a place to share the private parts of life. These are conversations you may have with close friends, but you can have them in this virtual world. Ad shared how pandemic affected her negatively and how she was able to see the silver lining during these difficult times.

[Ad] [whispers]: I did play more during lockdown yes, since i wasn't able to go out like usual
[Ad] [whispers]: But it might've been a result of me using my job because of the pandemic aswell. But it's probably a little bit of both to be honest
*[Ad] [whispers]: *me losing*
...
[Ad] [whispers]: Well, i did lose it (my job) quite late during the pandemic, so i'm currently between jobs. But i'm actively searching for one
[Ad] [whispers]: I've been a bit torn between it, on one hand it sucks losing my job and source of income of course. But i've been able to focus on myself in a completely different way, which i feel has had a positive impact
[Ad] [whispers]: on my life. So it's not all bad:)

World of Warcraft's game-play makes it a social experience in its virtual world. Players realise and appreciate this aspect of the game. When face-to-face interaction was limited with the pandemic conditions, WoW gives the opportunity to meet new people, make connections and socialise. Another aspect of sociable games is that people can share their stories freely since all they have is their avatars and character names. This works as "having a heart-to-heart talk" and can help with stress.

WoW has been around since 2004 (Blizzard, 2021) and players that started to game during its first years have strong attachments to it. This plays a part in coming back to the game from time to time since the game is the way they left it. The virtual world of it "remains unchanged", as the player Van calls it, and it brings back memories. This nostalgia plays a part in the coming back situation during the pandemic.

Conclusion

MMORPGs present virtual worlds that one can achieve, be immersed in it and socialize in its environment. Focusing on the World of Warcraft, this paper explores the levelling stage. Fieldwork data, collected while playing the game derived through participant observation and casual conversations with players, suggest playing WoW has become a method for emotional

coping against the pandemic since experienced players came back to the game to play more and socialize more during this time. In World of Warcraft during the pandemic, "homo ludens" (Huizinga, 1971) meets new people, enjoys their company while doing something, and shares his/her experience of the pandemic in WoW.

Understanding a virtual world could unfold ways to cope in the "real world". This paper argues that playing WoW could become a tool for better coping with the pandemic through its competition, chance, and simulation elements that create achievement-based, social, and nostalgic motivators in the game.

Acknowledgements

References

Allahverdipour, H., Bazargan, M., Farhadinasab, A., & Moeini, B. (2010). Correlates of videogames playing among adolescents in an Islamic country. *BMC Public Health, 10,(1)*. https://doi.org/10.1186/1471-2458-10-286

Bainbridge, W. S. (2007). *The Scientific Research Potential of Virtual Worlds. Science, 317(5837), 472–476.* doi:10.1126/science.1146930

Blasi, M. D., Giardina, A., Giordano, C., Coco, G. L., Tosto, C., Billieux, J., & Schimmenti, A. (2019). Problematic video game use as an emotional coping strategy: Evidence from a sample of MMORPG gamers. *Journal of Behavioral Addictions, 8(1)*, 25–34. https://doi.org/10.1556/2006.8.2019.02

Blizzard entertainment. (2021). Blizzard Entertainment. https://www.blizzard.com/en-us/

Evidence from a sample of MMORPG gamers. *Journal of Behavioral Addictions*, 8(1), 25–34. https://doi.org/10.1556/2006.8.2019.02

Boellstorff, T., Nardi, B., Pearce, C., Taylor, T. L., & Marcus, G. E. (2012). *Ethnography and virtual worlds: A handbook of method.* Princeton University Press.

Caillois, R. (1961). *Man, play and games* (Reprint ed.). University of Illinois Press.

Carver, C. S. (2010). Coping. In R. Contrada & A. Baum (Eds.), The *handbook of stress science: biology, psychology and health* (pp. 221-229). Springer Publishing.

Corneliussen, H. G., Rettberg J. W. (2008). *Digital culture, play, and identity: A world of warcraft reader.* Choice Reviews Online, 46(02), 46–0709. https://doi.org/10.5860/choice.46-0709

Deleuze, J., Maurage, P., Schimmenti, A., Nuyens, F., Melzer, A., & Billieux, J. (2019). Escaping reality through videogames is linked to an implicit preference for virtual over real-life stimuli. *Journal of Affective Disorders, 245*, 1024–1031. https://doi.org/10.1016/j.jad.2018.11.078

Geertz, C. (1973). *The interpretation of cultures*. New York: Basic Books.

Hine, C. M. (2000). *Virtual ethnography* (First ed.). SAGE Publications Ltd.

Huizinga, J. (1971). *Homo ludens.* Amsterdam University Press.

Hussain, Z., & Griffiths, M. D. (2009). Excessive use of Massively Multi-Player Online Role-Playing Games: A Pilot Study. *International Journal of Mental Health and Addiction*, 7(4), 563–571. https://doi.org/10.1007/s11469-009-9202-8

Johnson, D., Jones, C., Scholes, L., Carras, M. (2013), *Videogames and Wellbeing,*

Young and Well Cooperative Research Centre, Melbourne.

Kirby, A., Jones, C., & Copello, A. (2014). The impact of massively multiplayer online role playing games (MMORPGs) on psychological wellbeing and the role of play motivations and problematic use. *International Journal of Mental Health and Addiction, 12(1),* 36–51. https://doi.org/10.1007/s11469-013-9467-9

Mearls, M., & Crawford, J. (2014). *Dungeons & dragons player's handbook.* Renton, WA: Wizards of the Coast.

Nardi, B., & Harris, J. (2006, November). Strangers and friends: Collaborative play in world of warcraft. CSCW '06: *Proceedings of the 2006 20th Anniversary Conference on Computer Supported Cooperative Work*, 149–158. https://doi.org/10.1145/1180875.1180898

Nardi, B. (2010). *My life as a night elf priest: An anthropological account of world of warcraft (technologies of the imagination: New media in everyday life)* (Illustrated ed.). Digital Culture Books.

Przybylski, A. K., Weinstein, N., Ryan, R. M. & Rigby, C. S. (2009). Having to versus wanting to play: Background and consequences of harmonious versus obsessive engagement in videogames, *CyberPsychology & Behavior, 12(5)*, 485-492. https://10.1089/cpb.2009.0083.

Przybylski, A. K., Weinstein, N., Murrayama, K., Lynch, M. F. & Ryan, R. M. (2011). The ideal self at play: The appeal of videogames that let you be all you can be. *Pscyhological Science, 23(1)*, 69-76. https://doi.org/10.1177/0956797611418676

Ramshaw, A. (2020). 'World of warcraft is my home from home': An argument for the protection of virtual worlds. *Journal of Law, Technology and Trust, 1(1).* https://doi.org/10.19164/jltt.v1i1.1012

Sherlock, L. (2009). Genre, Activity, and Collaborative Work and Play in World of Warcraft. *Journal of Business and Technical Communication, 23(3), 263–293.* https://doi.org/10.1177/1050651909333150

Snodgrass, J., Lacy, M., Dengah, F. & Fagan, J. (2011). Enhancing one life rather than living two: Playing MMO's with offline friends. Computers in Human Behaviour, 27(3), 1211-1222. https://doi.org/10.1016/j.chb.2011.01.001

Snodgrass, J., Lacy, M., Dengah, F. & Fagan, J. (2011). Magical flight and monstrous stress: Technologies of absorption and mental wellness in azeroth. Culture, Medicine, and Psychiatry, 35(1), 26-62. https://doi.org/10.1007/s11013-010-9197-4

Snodgrass, J. G., Dengah, H. J. F., Lacy, M. G., & Fagan, J. (2013). A formal anthropological view of motivation models of problematic MMO play: Achievement, social, and immersion factors in the context of culture. Transcultural Psychiatry, 50(2), 235–262. https://doi.org/10.1177/1363461513487666

Tichon, J. G., & Mavin, T. (2016). Experiencing resilience via video games. *Social Science Computer Review, 35(5)*, 666–675. https://doi.org/10.1177/0894439316664507

Tolkien, J. R. R. (1991). *The lord of the rings*. HarperCollins.

Tonkin, A., & Whitaker, J. (2016). Playing for health. In A. Tonkin & J. Whitaker (Eds.), *Play in Healthcare for Adults: Using play to promote health and wellbeing accross the adult life span* (pp. 5–17). Routledge.

Wack, E. & Tantleff-Dunn, S. (2009). Relationships between electronic game play, obesity, and psychosocial functioning in young men. *Cyberpsychology & Behavior, 12(2)*, 241-244. https://doi.org/10.1089/cpb.2008.0151

Weiss, A., & Tettegah, S. (2012). World of Race War. *International Journal of Gaming and Computer-Mediated Simulations, 4(4), 33–44.* https://doi.org/10.4018/jgcms.2012100103

Weissman, Dustin R., "Impacts of Playing Massively Multiplayer Online Role-Playing Games (MMORPGs) on Individuals' Subjective Sense of Feeling Connected with Others" (2017). *PsyD Program in Clinical Psychology Doctoral Dissertations (Santa Barbara).* Retrieved from: http://aura.antioch.edu/psydcpsb/1

Williams, J. P., & Kirschner, D. (2012). Coordinated Action in the Massively Multiplayer Online Game World of Warcraft. *Symbolic Interaction, 35(3), 340-367.* https://doi.org/10.1002/j.1533-8665.2012.00022.x

World Health Organization. (2021a). Mental health and COVID-19. https://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/publications-and-technical-guidance/noncommunicable-diseases/mental-health-and-covid-19

World Health Organization. (2021b). Coronavirus disease (COVID-19). https://www.who.int/health-topics/coronavirus#tab=tab_2

World of Warcraft: The Wrath of the Lich King (PC version) [Massively Multiplayer Online Role-Playing Game]. (2008). Blizzard Entertainment.

World of Warcraft. (2021). In *Encyclopaedia britannica.* Retrieved from: https://www.britannica.com/topic/World-of-Warcraft

Vella, K., Johnson, D., Hides, L. (2013, October 2-4). *Positively playful: When videogames lead to player wellbeing* [Paper Presentation]. Gamification 2019 Proceedings, Stratford, Ontario, Canada.

Yee, N. (2006a). Motivations for Play in Online Games. *CyberPsychology & Behavior, 9(6), 772–775.* https://doi.org/10.1089/cpb.2006.9.772

Yee, N. (2006b) Motivations of Play in MMORPGs: Results from a Factor Analytic Approach, Retrieved from: http://www.nickyee.com/daedalus/motivations.pdf on 10th October 2011 at 13:10

Contact email: rengurel@gmail.com

Value Co-creation in the Multidisciplinary Sharing Between Design and Science:
The Case of a Portuguese Cutlery Industry

Germannya D'Garcia A. Silva, Federal University of Pernambuco, Brazil
Rosana Ferreira Alexandre, Digital Transformation CoLab, Portugal
Rute Silva, University of Minho, Portugal
Bernardo Providência, University of Minho, Portugal

The Barcelona Conference on Arts, Media & Culture 2021
Official Conference Proceedings

Abstract
This article presents the first impressions of the research project on international cooperation between Universities and a Portuguese cutlery industry that, based on Emotional Design and Cognitive Science, aims to create bonds with its customers and distributors. In times of social isolation, the habit of set the table to share family moments enabled a way to create affective memories. And, when a product manages to arouse positive affection in the user, a trusting relationship with the brand is created and, consequently, a competitive advantage in the market. In this way, once the aesthetic and usability requirements are met, the next step is to meet the users' psychological and sociological needs. The methodological innovation of this project is based on the correlation of brain electrophysiological data with qualitative data from subjective assessment protocols, in order to support the process of value co-creation and tableware design. Observation techniques, semi-structured interviews and questionnaires with affective rating scales were associated with the physiological results of electroencephalography (EEG) with end users, in order to elicit affective inputs in the creation of the artifacts. The first results point out that the emotional reactions aroused through the visual appearance faded when touching and handling objects, especially with those that innovated too much in terms of shape and texture.

Keywords: Emotional Design, Cutlery, Cognitive Science, Value Co-creation

iafor
The International Academic Forum
www.iafor.org

Introduction

Universities' extension actions are academic activities linked to teaching and research, whose mission is to promote a relationship of dialogue, transformation and integration between the University and Society, contributing to the sharing of knowledge generated between them. In this sense, international cooperation between Universities is presented as a knowledge transfer strategy. In this project, the novelty is the involvement of industry in the process of international cooperation between universities aiming at technological innovation and design.

In a future perspective, the purpose of this research is the circular design of new products from the direct interaction with its target audience. For this purpose, researchers from Lab2PT - Laboratory of Landscape, Heritage and Territory at the University of Minho[1]- Portugal are in international cooperation; researchers from the O Imaginário Design Laboratory at the Federal University of Pernambuco (PE)[2] - Brazil and HERDMAR[3], a traditional Portuguese cutlery industry, headquartered in Caldas das Taipas, Guimarães.

In order to reach this goal, three objectives were outlined: 1. to increase user participation in the design process, using cognitive science tools, to favor the understanding of how to obtain positive emotions from the company's products; 2. extend the approach of Ergonomics with Materials Technology to understand the perception of the quality of HERDMAR® industry materials and 3. add value to the brand's products from the relationship between Material Technology and the areas of Emotional Design and Ergonomics. The theoretical foundations of this project are based on the pillars of Circular Economy, Sustainability, Co-creation of value, Cognitive Science and Emotional Design. Figure 1.
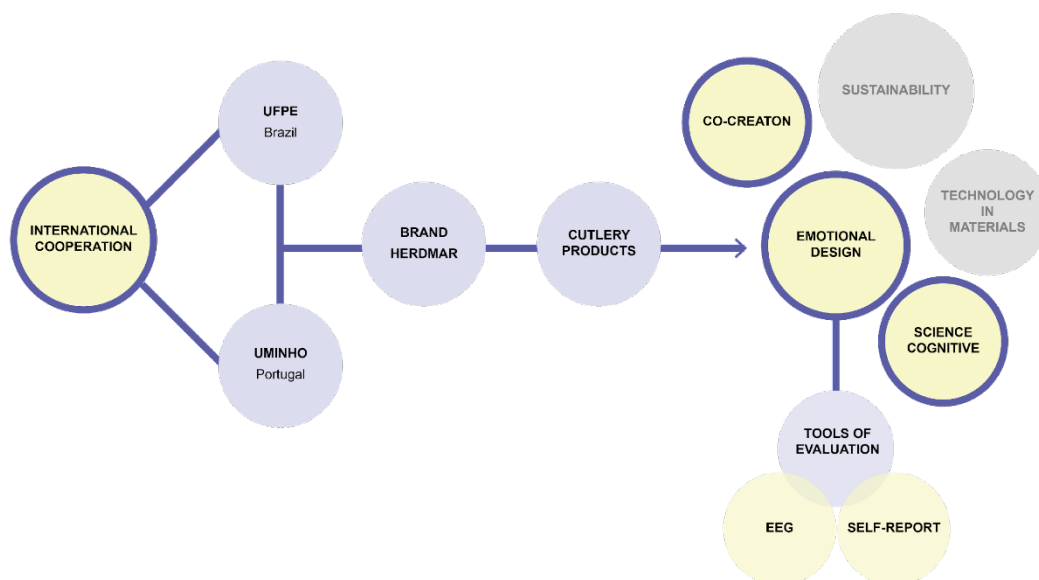
Figure 1: Concepts and Central Themes of the Investigation

However, in this article, we will present the investigation method proposed for the first objective of this extension action, based on the results of the study developed by Silva, R (2020) that allowed us to assess important considerations for the selection of cutlery sets.

[1] https://www.lab2pt.net/site/?module=site&target=home
[2] https://www.oimaginario.com.br/
[3] https://www.herdmar.com/pt/pt/

Finally, we sought to verify the relevance of applying the EEG tool associated with affective assessment techniques to support the process of co-creating the value of tableware with potential HERDMAR brand consumers.

The Relationship Between Universities and Herdmar

In the context of partnerships with Industry, both the DeTech (Design and Technology) research group at Lab2PT[4], as well as the School of Architecture at the University of Minho, through their bachelor's and master's degrees in design, have been promoting the possibility of temporary integration of students in the company's staff, providing the application of acquired knowledge and individual talent in the development of projects for the brand. Figure 2.

VINCI – HERDMAR 2016
João Pedro Dias Ferreira
Development of a Cutlery line

MILÀ - HERDMAR 2018
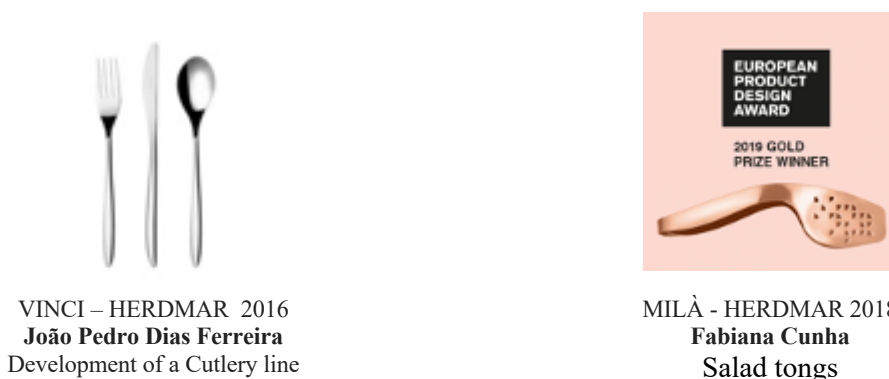**Fabiana Cunha**
Salad tongs

Figure 2: Products Developed in Partnership with Herdmar and the University of Minho's School of Architecture

On the other side of the Atlantic Ocean, the Design Laboratory O Imaginário - UFPE has been operating since 2001 on the research, teaching and extension triad, contributing to reflection, knowledge production and applied research in design and its relationship with material culture, object systems and sustainable development, in artifacts, processes, services and contemporary phenomena.

Imaginário researchers consider design as one of the elements of a macro process that configures and materializes industrial or handcrafted products and develops design projects that involve the relationship between design, culture, sustainability, ergonomics, materials and manufacturing processes.

And through integrated teaching-research-extension activities, since 2003, through the Design courses at UFPE, they work in partnership with companies in the State of Pernambuco (PE) - Brazil for product development with emphasis on improving design processes and adding the value of artifacts.

Given the expertise of these laboratories, added to the opening for scientific investigation in an industrial environment, a potential partnership is envisaged that intends to expand the approach of Design, Cognitive Science, Ergonomics and Materials Technology in understanding the factors that affect the perception of quality of HERDMAR® products on two of the five continents on which it is present.

---

[4] https://www.lab2pt.net/site/?module=publicPages&target=details&id=6

1. Theoretical Reference

1.1 The Habit of Dressing the Table with Cutlery Artifacts and the Consumer's Trusting Relationship with the HERDMAR Brand

Currently, food, more than a physiological need, is a vehicle for cultural expression. Eating habits and practices function as a reflection of social dynamics, and material culture as an important means of expression of current rites. According to Nishima and Queiroz (2016), behavior at the table, manners, is a result of social constructions that are loaded with meanings. The authors of this research corroborate this view regarding the act of eating beyond a physiological need, it is a cognitive act, as it involves attention, perception, memory, reasoning, imagination, thinking and judgment.

The meanings of feeding rituals also find strong expression in material culture. This also clarifies the presence of integration mechanisms, the large offer of tableware and the social distinction related to the rules that permeate a meal, creating good table manners so that inclusion in the environment is guaranteed.

The authors of this research also believe that the habit of set the table to share family moments enables the creation of affective memories. Such behavior was felt more intensely during the social isolation experienced in recent months due to the sanitary restrictions imposed by the COVID-19 pandemic. Thus, the choice of cutlery artifacts permeates the communication function, as it needs to communicate the function to be performed; at the same time, in the eyes of the society that observes it, it communicates an adaptation to certain spaces and situations. In this sense, "what you eat is as important as when you eat, where you eat, how you eat and who you eat with" (Carneiro, 2005).

Emotional aspects are also evoked in the purchase decision or even in the manipulation of cutlery artifacts placed on the table. It is important to highlight that these were not invented as technical tools with obvious purposes and clear instructions for use. The change in meanings throughout history was responsible for the inclusion of these artifacts in the habit of eating and, consequently, of set the table.

And it was like this, in a domestic context, in 1911, in a rented house on the banks of the River Ave, Guimaraes, Portugal, that Herdmar was created by Manuel Marques and his wife Maria Silva. The waters of the River Ave moved the mill that generated and supplied the energy for the construction of cutlery artifacts still in carbon steel (Coelho, 2017).

In 1930, with the arrival of electricity in Guimarães, it was possible to equip the workshop with the first electric motor for the production of stainless steel artifacts. In the post-war period, there was a new evolution in the cutlery sector: technological innovation in machines and an increase in the demand for products, which resulted in a need to hire more workers and, consequently, to increase the manufacturing area. In 1950, the factory already had 28 workers and the four brothers Francisco, António, Adão and Abel, sons of Manuel Marques and Maria Silva. It is at this stage in the mid-20th century that one begins to think about the first attempts to assert itself as a brand: product identification through a stamp and a number (in this case number 11, which corresponds to the year the company was founded).

The following years were years of preparation for the future. We invested in technical conditions in order to optimize the production and quality of products and, in this way, better

respond to the needs and demands of the national and international market; they established cross-border contacts mainly with the former Portuguese colonies in Africa: which resulted in trade agreements that still continue today, now with the Portuguese-speaking African countries (PALOP).

In the 1980s, export and brand affirmation objectives were established, which include the strategy of its presentation in events such as Ceramex (Lisbon), Macef (Milan) and also the Ambient Show (Germany), which is one of the most important in the field and in which Herdmar actively participates.

Today, the company has an innovative industrial park that combines traditional metallic stamping with digital manufacturing and quality control that guarantees the brand is present in 72 countries on five continents. The material for the production of cutlery is essentially stainless steel. The company, for some models, performs the surface treatment of artefacts with titanium oxide, which gives the steel a different color and improves corrosion resistance.

1.2   Design, Emotion and Co-creation

Tables, chairs, sofas, crockery, cutlery… The things that surround us on a daily basis are more than functional objects. In many cases, these objects accompany us not only for reasons of usefulness or practicality, but also for the affective relationships they arouse, the memories they awaken or the sensations they bring us (Norman, 2004; Damazio, 2006). And it is not new that Design is concerned about associating these social, symbolic and emotional values to its projects. As Design is an area that idealizes, conceives and implements products, environments, services and interactions, it has always been concerned with these issues (Forlizzi et al, 2003), even if sometimes unconsciously or unintentionally.

From the late 1990s onwards, the concern with people's emotional responses evoked by objects gained strength and became an area of interest in Design (Kurtgozu, 2003; Desmet & Hekkert, 2009). According to Norman (2004), the usability and functional aspects of objects are fundamental characteristics for them, as well as the emotional component and symbolic functions. Therefore, we see a shift in thinking from object-focused design to human-oriented design, with its particular way of seeing and understanding the world. After all, "We do not react to the physical qualities of objects, but to what they mean to us" (Krippendorff, 2000, p. 89).

After investigating the significant domestic objects for North American families, Csikszentmihalyi & Halton (1981) highlighted the importance of the affective relationship that people have with everyday artifacts. "The things with which people interact are not simply tools for survival, or for making survival easier and more comfortable. Things embody goals, make skills manifest, and shape the identities of their users" (1981, p. 1).

When thinking about the reactions between people and objects, Norman (2004) suggests that three aspects of design be taken into account: the visceral, behavioral and reflective levels. The visceral aspect is related to the beginning of the emotional process, instinct, quick judgment. If we think about our interaction with objects, this level has to do with how we react to their appearance. The behavioral level focuses on actions we do unconsciously. It is related to the use and experience we have with artifacts taking into account aspects such as: functionality, effectiveness and usability. Finally, we have the reflective aspect, which is the level of understanding and interpretation, where actions end up being processed. In our

relationship with objects, it has to do with our personal satisfaction and the awakening of memories. Although these dimensions have been explained separately here, they are interconnected, one affects the other, and are present in any artifact.

It is common to think of the emotional side as a counterpoint to the rational, but recent research shows that this is not quite the case (Norman, 2004; Desmet and Roeser, 2015; Damásio, 2019), although in the popular sphere there is this distinction. As Desmet and Roeser explain to us, "emotion research has shown that emotions are necessary for our practical rationality." (2014, p. 2). As Slovic et al (2007) also tells us, affect[5] is an important factor that influences our judgment and decision-making. Therefore, people base their choices not only on what they think, but also on what they feel.

According to Damásio (2019) he also clarifies the matter when he says that emotional intelligence is "…a popular term, it is something that sounds good, but … intelligence is all of it emotional to a greater or lesser degree". In other words, emotions are not something separate, but part of intelligence as a whole and of the decision-making process, considering that "Those who lose the possibility of having certain emotions and certain feelings start to decide worse, which means that their cognition is negatively affected by lack of emotions."

Emotions are a program of actions – disputed by the mind, which trigger a physical reaction in our body, for example, in muscles. Feelings are the mental experience of the reaction to these events. In this sense, they have an influence on the rational behavior of human beings and play a critical role in making a purchase decision (Damásio, 2017).

But how to understand how a product can provide positive experiences? And which artefacts are valuable to people and why? It is known that values change, depending on time, context, culture, economy. Hence, "Understanding what things are valued by people, and why, is essential for understanding their feelings toward new solutions, and what actions can be expected." (Ouden, 2012, p. 22). In this sense, value is not only a monetary issue, but also an aesthetic, symbolic, functional, sentimental issue that has a direct relationship to people.

The design has been thinking about strategies to open up its creative process to the general public. The customer/user is now invited to participate in a more active way, from the idealization to the reconstruction of products. "Companies are transferring some of the control and starting to see their customers not as 'end users' but as participants in a two-way process." (Brown, 2010, P. 189). The understanding of design about its relationship with people has been undergoing successive and significant changes since the end of the last century. According to Sanders (2006), if in the 1980s it was more common to refer to them as customers or consumers, in the 1990s the term user became the most common, as design became focused on the individual who used the product or in the uses of the products, but now with a more active role in the interaction with the products.

The concept of inviting people to participate in the process is based on the premise that what we help to build receives another personal and emotional value. Donald Norman clarifies that "perhaps the objects that are most intimate and direct to us are those we build, hence the popularity of handcrafted objects or homemade furniture" (Norman, 2004, P. 48). By transforming the customer into a co-creator, design appropriates this intimacy and, therefore,

---

[5] "affect'' means the specific quality of ''goodness'' or ''badness'' (i) experienced as a feeling state (with or without consciousness) and (ii) demarcating a positive or negative quality of a stimulus (Slovic, 2007, p. 1333).

tries to add other meanings to its products. In this sense, Suri (2003) also highlights the importance of incorporating public participation even in the experience planning stages. Given these assumptions, we believe that tools from cognitive science can be used to capture value creation inputs from potential customers to apply in the design of cutlery products. In this case, what is under analysis is whether the association of biofeedback tools, which measure the frequency ranges of the EEG signals to affective assessment techniques, can support the process of co-creating the value of tableware with potential consumers of the company.

2. Methodology

Assessment tools from cognitive sciences can be based on voluntary responses – subjective assessment and involuntary responses – tools for brain functioning and the autonomic nervous system. Based on the study developed by Silva (Silva, 2020; Providencia and Silva 2020), the application of the PANAS affect scale (Positive and Negative Affect Schedule) was used as a subjective assessment and the electroencephalography to measure the physiological brain response of users to the interaction with the cutlery artifacts.

2.1 Subjective Evaluation

Subjective assessment can be applied through questionnaires or interviews. The PANAS scale - positive and negative affect, was developed in 1988 and is a scale that uses different words to describe feelings and emotions. It aims to assess the individual's affective component at a given time. Thus, it is possible to understand how these emotions influence the individual to act and make decisions (Merz et al., 2013). The scale is generally applied with a 5-point Likert scale, between 1 and 5 (1- very little or nothing and 5 - extremely). In the case study methodology evaluated in this research, the applied PANAS scale was validated for the Portuguese language of Portugal by Galinha and Pais-Ribeiro (Galinha, Pais-Ribeiro, 2005). This model is composed of twenty words associated with positive and negative affect, 10 positive variables and 10 negative ones.

2.2 Electroencephalography

Physiological responses can be measured with different techniques and equipment and are believed to be applicable to the study of emotions. In this field, electroencephalography has been gaining notoriety in its application to design, making it possible to identify the EEG as an opportunity in the emotional assessment of the individual with a given product.

Electroencephalography records the brain waves that are formed by synchronizing large populations of neurons in electrical signals produced by cells in the brain (Handy, T. C., 2005). In practice, the technique measures electrical activity in the cerebral cortex during collection with the individual. In addition to its high temporal resolution, it is exceptional for the study of cognitive processes as it directly records brain activity in the period in which cognition takes place. The information collected depends on how many electrodes are used in brain mapping. In the assessment of emotions, the analysis is usually done through the frequency ranges of the EEG signals. The frequency (speed of electrical oscillations is measured in seconds – Hertz (Hz), one cycle per second. Frequency waves are categorized by frequency into five types: Gamma, Beta, Alpha, Theta, Delta. The tools with the EEG, have allowed to directly measure the physiological and emotional response of individuals, since the data collected through questionnaires are subject to distortion of the users' reality.

For the selection of cutlery – spoon, fork and knife, some requirements with the brand were defined, such as: shape, color and texture. The models considered to be the most stimulating in terms of emotional reaction were chosen, as well as the models present in the market that the brand was interested in evaluating. A total of 12 sets of cutlery were tested by analyzing six shape variables and six finish variables with different colors and textures. Figure 3. The tasks were stratified into three blocks of activities: observing the photographs, observing and touching the real products (Silva, R., 2020).

Figure 3: Cutlery set selected for the experiment (Silva, R., 2020)

It should be noted that due to the sanitary restrictions imposed by the Pandemic, only 11 users were evaluated. The initial sampling plan was 30 individuals. After giving informed consent and receiving accurate information about the general objective of the experience, participants were invited to sit in a comfortable chair and each participant was prepared. The experience brought together three blocks of tasks with the cutlery objects: observing product photographs, observing the real product and touching/handling the real product. Figure 4.
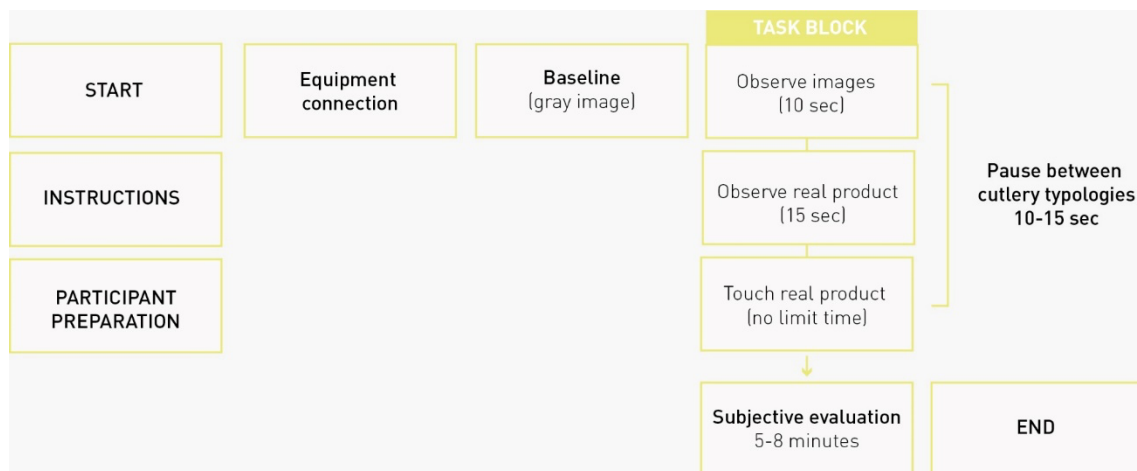
Figure 4: Experiment protocol (Silva, R., 2020)

For objective evaluation of emotion, the EEG biofeedback tool was applied using the EMOTIV insight equipment, composed of five (dry) electrodes – AF3, AF4, T7, T8 e Pz. In the activity block, the user initially looked at the photographs for 10 seconds; with a 10 -15 second pause per typology. Physiological signs began to be registered at the moment the participant was exposed to the stimulus. Finally, the participant manipulated the real product with no set time. Afterwards, the participant responded to the subjective evaluation protocols for five to eight minutes. At the end, the participants answered a questionnaire composed of three parts: A (shape variable), B (finish variable), C (shape and finishing variable). Figure 5.
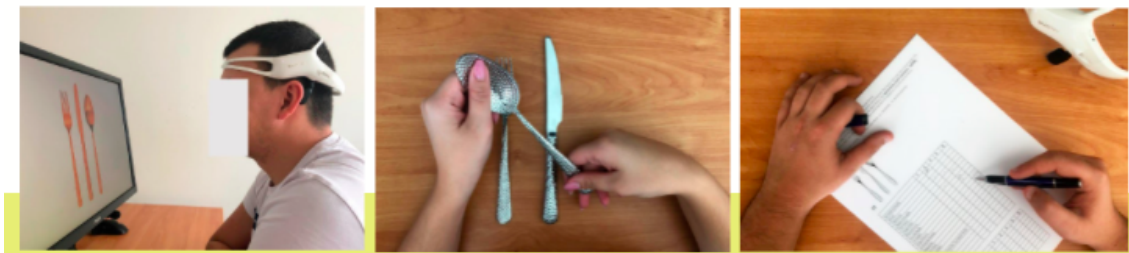

Figure 5: Experience stages. (Silva, R., 2020)

The questionnaire was divided into three parts: Part A - self-report scale composed of a 5-point Likert scale; PANAS scale (Galinha and Pais-Ribeiro, 2005); and a Likert scale applied to nine characteristics related to the typology of products: 'quality', 'style', 'ergonomics', 'color', 'weight', 'texture', 'shape', 'luxury' and 'harmonious'. In part B, participants were asked to indicate characteristics and comments for each of the object typologies. Part C included open and closed questions, developed through levels of emotional design (Norman, 2004) that allowed a comparison to be made with the other parts of the questionnaire.

The data collected through a subjective assessment - provided by the participants - allowed to identify important considerations in the study of this category of objects. The emotional response in relation to positive and negative affects demonstrated that the textured, irreverent shape and color cutlery are the ones that arouse more interest from the point of view of emotional response. The results were analyzed on the theory of Norman (2004), in which the cognitive process results in three levels in the processing of information from individuals regarding a design – visceral, behavioral and reflexive. The study showed that the methodology applied in the questionnaires is effective and allows collecting information

about what we should take into account when evaluating the emotional component of cutlery products (Silva, R., 2020).

Data collected using the EEG tool were processed in Excel. The data obtained were placed in the SPSS program – software for advanced statistical analysis and analyzed through analysis of variance (ANOVA), with significant differences at an alpha level – 0.05. For all ANOVAs, the Greenhouse-Geisser correction was applied whenever the sphericity assumption was violated, and the Bonferroni adjustment was used to correct for multiple comparisons.

3. Results

The typologies – 'Nohc', 'Cairo', 'Malmo', studied in the interaction between the user and the product, proved to be important in the study of semantic analysis and levels of emotional design defined by Norman (2004) - visceral, behavioral, reflective. 'Nohc' aroused an immediate reaction - surprise, interest, at a visceral level, by the material used in the cutlery handles - imitation cork. This reaction in the visual appearance changed when the individuals handled the cutlery and realized that the tactile sensation did not correspond to the memory they had of that material, but of polymeric material. In this way, the answers in the questionnaire demonstrate that the set of cutlery has lost its additional value at the behavioral level. Contrary to 'Nohc', 'Cairo' responded in negative affects at the visceral level - in two participants, creating feelings of repulsion and contempt. The reason for this feeling is the fact that the texture is associated with phobias. On the other hand, 'Malmo' stood out for its design, which in its simplicity is so different, awakening a positive reaction from all participants. The positive affect adjectives reached the highest values, between 3 and 4 on the 5-point Likert scale. A curiosity about these cutlery sets was that some participants said they would buy this product even though they considered it not to be the most functional. In comparison to 'Nohc', the visceral level prevailed over the behavioral level.

In relation to cutlery of the finishing variable, it is important to mention that the results allow us to conclude that the visual appearance, in terms of color, seems to be a factor as important as the shape. In general, a stainless steel finish is preferred over cutlery with a PVT application.

Regarding the EEG results, the reasons why it was not possible to identify significant differences may have been due to several factors, such as: (1) Algorithm: in the study, the output provided by Emotiv software was assumed, which for copyright and patent reasons is not shared with users; (2) number of participants: due to the restrictions of the pandemic, the sample decreased from 20-30 to 11 participants; (3) Equipment - the use of the Emotiv insight equipment involved reducing brain mapping to five electrodes when the laboratory equipment initially defined for use in the investigation consisted of 64 electrodes.

Despite these limitations throughout the investigation, this process allowed us to assess knowledge for a new application of the EEG in the field of product design, and to replicate the study in a real context, taking into account the results of the investigation (Silva, R., 2020). This result was used as a pilot method, as it allowed us to assess important considerations to be highlighted in this study, for the selection of new sets of cutlery.

Conclusions

The intention of this project, an international research project that involves two universities, combined with a Portuguese cutlery industry, is to understand why certain cutlery triggers positive emotions, awaken good memories and create emotional bonds. For this, we appropriate concepts from emotional design combined with cognitive science and subjective assessment techniques to help us understand how consumers make certain decisions at the purchase time. Also why certain cutlery, with certain characteristics, is less appreciated or the other way around, why other cutlery objects awaken positive feelings and are preferred.

Objects are neither neutral nor purely functional. They promote and mediate our lives, from the interactions and experiences they provide us. They are also material supports that help us to establish emotional relationships and affective memories. It is not by chance that we keep so many things. The act of dressing the table and the concern with cutlery, glasses, and crockery follows this path, it is not just to serve people, but also encompasses a great social and symbolic dimension.

If the material configuration of an object can give us clues about its nature, we cannot fail to take into account the perceptive and subjective factors, the repertoire of the subjects involved in the process of signification, as well as the passage of time. The fact is that it is common for us to associate the function of an artifact to what we can do with it. But unlike the functionalist maxim in which "form follows function", we emphasize that there is not just one, but rather several functions associated with objects, whether they are of a more objective or subjective order.

In the results of the first study carried out in Portugal, there were no significant differences between the different sets of cutlery, but the values allow us to observe differences between the different participants and cutlery. This result may have been influenced by several factors, such as: equipment, number of variables applied in the study, sample number.

The first results show that the emotional reactions aroused through the visual appearance faded when touching and handling objects, especially with those that innovated too much in terms of shape and texture. However, due to the number of variables in the first study and the low frequency of volunteers in the second, the results cannot be statistically validated.

In this sense, the importance of redoing the protocol was identified, taking into account the results of the study and performing new EEG collections. The method is being tested and expanded with potential HERDMAR brand consumers in two Master's dissertations that are underway with the same field methodology in different territories: Pernambuco- Brazil / Guimarães - Portugal.

Thus, simultaneous experiments are being carried out in Brazil and Portugal with a new sample of models. In total, there will be eight different models of spoon, fork and knife to analyze the aspects: shape and color. Figure 6.
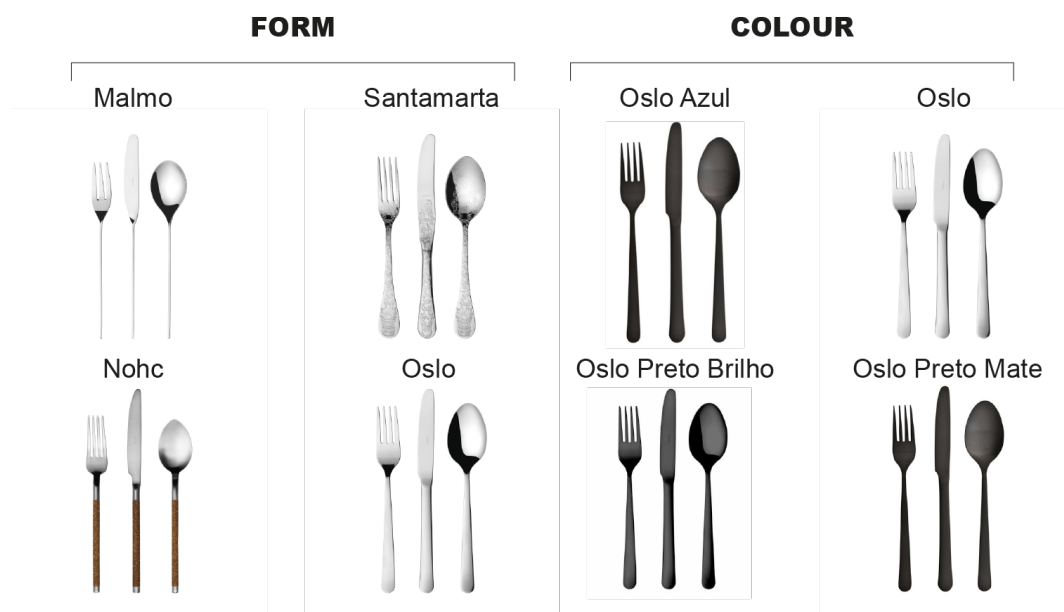
Figure 6: Sets of cutlery set for experience

In Brazil, the Laboratory of Neurodynamics of the Department of Physiology and Pharmacology at UFPE is a partner in carrying out biofeedback tests, as well as the Laboratory of Neurosciences of the School of Psychology at the University of Minho.

The EEG tool will be applied for the moment of virtual and haptic assessment. The self-report tool (PANAS) is only for haptic assessment. The user sample plan is thirty volunteers in both cities. The data will be processed and crossed to assess the convergences and divergences of the South American and European markets. During the process, we will continue to involve people, bringing their participation and involving them in the creative process of developing new products. The assessments that have already been carried out are a first step in this direction to understand what is really important to them, what they like or what they do not. In a second moment, we intend to use more participative techniques from the initial stages of the creation of artefacts. The inputs will serve as inputs for new launches, the company's market positioning strategies and to create stronger and more meaningful bonds between the brand and its consumers.

The research also intends to test the products with companies selling utilities and evaluate the user experience in the context of use in restaurants and department stores.

Acknowledgements

References

Buchanan, Richard. Declaration by Design: Rhetoric, Argument, and Demonstration in Design Practice. In: Design Issues. Cambridge: MIT. Vol. 2, N. 1, p. 4-22, 1985.

Cardoso, R. (2012). Design para um mundo complexo. CosacNaif.

Carneiro, H. S. (2005). Comida e sociedade: significados sociais na história da alimentação. História: questões & debates, 42(1):71-80.

Coelho, A. M. A. (2016). O Design de novos produtos através do reaproveitamento de moldes cuteleiros da Marca Herdmar. Dissertação de Mestrado, Universidade de Aveiro.

Csikszentmihalyi, M., & Halton, E. (1981). The meaning of things: Domestic symbols and the self. Cambridge university press.

Damásio, A. Entrevista RTP. António Damásio e os riscos das redes sociais. 2019.

Damazio, V. (2006). Design e Emoção: alguns pensamentos sobre artefatos de memória. 7º congresso de P&D em Design.

Desmet, P. M., & Hekkert, P. (2009). Special issue editorial: Design & emotion. International Journal of Design, 3 (2).

Desmet, P. M., & Roeser, S. (2015). Emotions in design for values. Handbook of Ethics, Values, and Technological Design: Sources, Theory, Values and Application Domains, 203-219.

Forlizzi, Jodi; DiSalvo, Carl; Hanington, Bruce. (2003) Emotion, experience and the design of new products. The Design Journal, V. 6, Issue 2, p. 29-38.

Galinha, I.C., Pais-Ribeiro, J.L. (2005). Contribuição para o estudo da versão portuguesa da Positive and Negative Affect Schedule (PANAS): II - Estudo psicométrico [Contribution to the study of the Portuguese version of the Positive and Negative Affect Schedule (PANAS): II - Psychometric study]. Análise Psicológica 23(2), 219–227.

Handy, T. C. (2005). Event-related potentials: A methods handbook. Cambridge, MA: MIT Press.

Krippendorff, K. (2000). Design centrado no ser humano: uma necessidade cultural. Estudos em design, 8(3), 87-98.

Kurtgözü, A. (2003). From function to emotion: a critical essay on the history of design arguments. The design journal, 6(2), 49-59.

Merz, E. L., Malcarne, V. L., Roesch, S. C., Ko, C. M., Emerson, M., Roma, V. G., & Sadler, G. R. (2013). Psychometric properties of Positive and Negative Affect Schedule (PANAS) original and short forms in an African American community sample. Journal of Affective Disorders, 151(3), 942–949.

Nishimura, J. S., & Queiroz, S. G. (2016). Cultura material e alimentação: A evolução dos utensílios à mesa e a consolidação de comportamentos durante a refeição. Demetra: Alimentação, Nutrição & Saúde, 11(4), 951-964.

Norman, D. A. (2004). Why we love (or hate) everyday things. Perseus Books Group.

Ouden, Elke Den. Innovation Design: Creating value for people, organizations and society. Springer: London, 2012.

Providência, B., & Silva, R. (2021). An Exploratory Approach with EEG – Electroencephalography in Design as a Research and Development Tool. In International Conference Innovation in Engineering (pp. 245-256).

Silva, R. (2020). O EEG – Eletroecefalografia como ferramenta de apoio na componente emocional de desenvolvimento de projetos de design. Dissertação de Mestrado, Universidade do Minho.

Slovic, P., Finucane, M. L., Peters, E., & MacGregor, D. G. (2007). The affect heuristic. European journal of operational research, 177(3), 1333-1352.

Contact email: providencia@eaad.uminho.pt

Social Media: The Site For Methodological Inquiry in Social Science Research

Murchana Kaushik, Queen's University, United Kingdom

The Barcelona Conference on Arts, Media & Culture 2021
Official Conference Proceedings

Abstract

This paper attempts to locate the significance of social media content analysis as a tool of data collection in social science research. In present times, it is seen that people increasingly use social media sites to share their opinions about issues of socio-political relevance. This paper analyses how recent studies on nationalism and identity have used public discourses on the social networking sites – Facebook and Twitter as tools for collecting data on the broad areas of identity formation, nationalistic assertion, etc. For this purpose, this paper analyses four studies that have highlighted the following four distinct instances of nationalistic assertions through social media platforms in different parts of the world - Donald Trump's campaign on Twitter for the 2016 Presidential elections, the importance of Facebook in the union flag protests in Northern Ireland in 2013, significance of Facebook in discourses on identity and ethnicity in Hongkong, and the use of Twitter in the discourse on refugee citizenship in Turkey. These studies have been purposively selected due to two primary factors- the novelty of their research approach and also because they are illustrative of four distinct cases of identity assertion representing four different cultures, societies, economies. By highlighting the advantages and the limitations of social media content analysis, this paper attempts to throw light on the significance of locating social media platforms as sites of methodological inquiry in social science research.

Keywords: Social Media, Methodological Tool, Social Science Research

iafor

The International Academic Forum
www.iafor.org

Introduction

"A typical user now spends 2 hours and 25 minutes on social media each day. Added together, the world's social media users are expected to spend a total of 3.7 trillion hours on social media in 2021 – which would be 'equivalent to more than 420 million years of combined human existence" (Digital 2021 Global Overview Report, 2021). This metaphorical illustration appropriately highlights the magnanimity of the outreach of social media globally in present times.

The International Telecommunication Union (ITU) estimate states that in 2021, 63% of the total population of the world are internet users. According to the Digital 2021 Global Overview Report 2021, 53% of the world's population use social media as of January, 2021. In the list of the most used social media platforms, Facebook, Youtube and Whatsapp occupy the top three positions, with each platform having 2000 million users or more. Amongst other popular sites are Facebook Messenger, Instagram, Tiktok, etc. The most common reasons behind people using social media are: News & Current affairs, entertainment, time-pass, to be updated about friends, keep others updated about oneself, research about products to be bought, social networking, share opinion, work networking, FOMO (Fear of missing out), sports, celebrity news, charitable causes (Digital 2021 Global Overview Report, 2021).

The available statistical evidence speaks volumes about the role and influence of social media in the daily lives of people all over the world. It is seen that people not only network with their close friends and family through social media platforms, but also rely on them for news, information about events, incidents, etc. Social media, therefore, has developed to be a fertile ground for observing and analysing social dynamics. This study tries to understand how social media has been used as a methodological tool to extract and analyse data by social scence researchers in recent times. For this purpose, it takes into account four different studies which have used social media platforms as sites for data collection and analysis. The selected studies highlight four distinct instances of nationalistic assertions through social media platforms in different parts of the world - Donald Trump's campaign on Twitter for the 2016 Presidential elections, the importance of Facebook in the union flag protests in Northern Ireland in 2013, significance of Facebook in discourses on identity and ethnicity in Hongkong, and the use of Twitter in the discourse on refugee citizenship in Turkey. These studies have been purposively selected because of the novelty of their research approach and also because they represent different cultures, societies, economies. I try to understand the methodology adopted by these studies, discuss the advantages and limitations of using social media as a research site, with a view to understanding a new methodological approach in the social sciences.

Social Media: The New Field

The entity of the 'field', its significance, and the ways to enage with it have been well deliberated upon by social scientists (Srinivas, Shah, & Ramaswamy, 2002; Wax & Wax, 1980; Davis, 1984; Everhart, 1984). The field serves as the location which enables a researcher to see, understand and analyse a phenomenon or event. It not only provides insights into aspects of social significance, but also facilitates the researchers to draw inferences and contribute to the knowledge repository. Malinowski (Malinowski, 1922), Srinivas (Srinivas, 1952), are examples of some early landmark field studies. The notion of the 'field' in these studies is however, that of a physical space which is out there, which is characterised by a visible social engagement among people, whereby the interplay of

institutions, values and norms in the daily lives of a society and it's people can be seen. Contrary to this idea of a physical space and tangible activities, the social media platforms offer an alternative view of the entity of the 'field' for social science researchers. I call it an 'alternative view' because it does not possess the basic characteristics of the traditional field (physical space, real interactions, etc.), yet it is a space where social interactions and engagement take place and hence serves as a location for social science inquiry.

In this section, four distinct ways of conducting social science research inquiry will be discussed. With particular reference to four different studies conducted in different parts of the world, this section shall highlight various ways of using social media paltforms as research tools. It is aimed that this account will not only reflect on the methods of using social media as a research tool, but also will bring to light the challenges and issues faced by the researchers in adopting social media as the field for data collection and analysis.

Facebook as a Site of Methodological Enquiry

A.

Li (Li, 2019) tries to understand how Facebook has been used as a platform for discussing and asserting issues of identity in Hong Kong. According to the 'Usage of Information Technology and the Internet by Hong Kong 2000 to 2019', as of 2019, approximately 94% of the households had access to the internet. It is estimated that approximately 85% of the total population of Hong Kong have access to social media as of 2021 (Digital 2021 Global Overview Report, 2021).

Li (Li, 2019) analyses how Facebook has been used as a medium by ordinary people of Hong Kong to discourse on issues of identity and nationality. Li (Li, 2019) identifies a fanpage called 'Hong Kong National History' (which is followed by over 5700 fans) and a digital publication called 'Hong Kong People's history of the thousand years' as the sources from which the required data for the study are collected. The mentioned page and it's attached publication are run by a person called Eric who is identified as a Honk Kong nationalist. For the purpose of analysis, Li (Li, 2019) collects the posts form these sources for a distinct period of time (1 April to 31 December, 2017). In order to systematically arrange the data, the author classified the derived content into five different categories. The five categories are: quoted with/ without comment (they include posts shared by Eric from different sources), quoted news/ non news with/ without comment (this includes new/ non-news posts shared by Eric from different sources), self-created content (posts related to history or advocacy created by Eric himself), private post-post and other (they include posts originally created by Eric himself). Based on the schema developed and the time period defined, the author collected 427 posts form the fan page. Li (Li, 2019) then analyses the collected data by taking into account the responses that the collected posts have received form the fan page followers. It states that the highest number of responses (likes, shares and comments) are received by the posts that are originally created by Eric, and not the ones which he shares from other sources. Li (Li, 2019) states that Eric's popularity is apparent in the massive attention that he receives from not only the followers of his Facebook page, but also from the news media, public intellectuals, etc. Athough Eric is not a political leader, nor a professional public opinion-maker, yet he is invited for media interviews, to deliver lectures and share his views, which are reflective of his popularity and acceptability amongst people.

Further, Li (Li, 2019) discusses some of the limitations of Eric's approach.

Further, Li (Li, 2019) also categorises Eric's discourse as civic studies or civic intellectuality, which is opposite to academic studies. Thus, on the one hand, Eric's posts may not be able to attract ordinary people due to the lengthy, historical, referenced nature of his work. At the same time, Eric's posts also run the risk of being attacked by academic scholars based on grounds of authenticity and quality of the content developed by Eric.

B.

Reillya & Trevisan (Reillya & Trevisan, 2016) analyse how Facebook played an important role in coordinating the first wave of the flag protests in Northen Ireland in January, 2013. It also discusses the ethical issues that may be involved in using Facebook as a site for conducting social science research. This study is based on data (16203 posts) collected and archived form the Facebook page called LPPU (Loyalist Peaceful Protest Updater) between the period of 2 and 22 January, 2013. The posts were collected and archived using the software called Discovertext. This particular period was used for data collection as this period is characterised by significant events in the Flag dispute issue. In order to systematically arrange and coordinate the data, this study followed the design of critical thematic analysis developed by Braun and Clarke (Braun and Clarke,2013). The study , therefore, begins with the reading of the posts with a view to identify the key themes from the collected dataset. In order to derive themes from the Facebook deliberations, the study adopts the use of word clouds. This helped the researchers to identify key words, important themes which people engaged with in the Facebook discusisons. The disadvantage of using word clouds is that it does not provide the context in which the words were used or discussed (Reillya & Trevisan, 2016). Thus, while it may be beneficial for researchers to the extent that it highlights important word or themes, at the same time it runs the risk of not contextualising the derived themes or word. Reillya & Trevisan (Reillya & Trevisan, 2016) further discuss some significant ethical concerns in using social media as a site for data collection.

One of the primary concerns for the authors was to decide on whether to engage in the process of data collection with the prior consent of the the Facebook page administrators, or to continue with data collection without informing the administrators. It may seem ethically sound to take prior permission or consent of the administrators. However, it runs the risk of making the administrators cautious of the content to be posted, which may further lead to manipulation of the contents.

Another ethical concern was how to present the collected data (posts) in a manner that it does not affect the reputation of the one who posted, while at the same time ensuring that the correct data/ information is reflected.

The other concern was whether to project the posts and comments of people in direct quotes. While on the one hand it would mean a transparent way of presenting data, on the other hand, it could also imply harm to the content creators. Thus, the authors decided to present the posts of only the known leaders of the flag protests in direct quotes, while abstained from doing that in case of the ordinary people (rank and file protestors) (Reillya & Trevisan, 2016).

Twitter as a Site of Methodological Enquiry

A.

Schertzer & Woods (Schertzer & Woods, 2021) study how Twitter was used as a medium of mass communication by Donald Trump during his 2016 Presidential campaign. According to the "Computer and the internet use in the United States: 2018" (2021), 85% of the households in the United States have broadband internet connection. Whereas, 82% of the total population use social media (Digital 2021 Global Overview Report, 2021). The study takes into consideration a total of 5,515 tweets which were sent by Trump during June 15, 2015 (Trump's presidential campaign was announced on June 14, 2015) and January 20, 2017 (the day of Trump's inauguration). All the tweets were collected from a public archive, which were then read by the authors. The tweets were then coded with the help of a software called NVivo. With a view to understanding the ethno-cultural content that Trump projected through Twitter, this study bases itself on a coded framework of five distinct categories of ethnic identity. The five categories include: People (It refers to the representation of an ethnic community through norms, values, beliefs, practices, etc.); Homeland (it refers to the representation of the community's imaginary homeland); History (It refers to the representation of the ethnic community's history); Religion (It refers to the representation of the ethnic community's religion); Ethos (It deals with the idea of representing the ethnic community's uniqueness). This framework has been adopted by the authors of the study from the work of Smith's analysis (Smith, 1986).

B.

Bozdag (Bozdag, 2019) analyses social media representations of refugees in Turkey and discussed their role in shaping public opinion. According to the Digital 2021 Global Overview Report (2021), approximately 77% of the population are internet users and 70.8% of the population are social media users in Turkey as of January 2021. Bozdag (Bozdag, 2019) shows how Twitter can be located as a platform to understand people's perceptions about the issue of refugees in Turkey. The study concentrates on the period between 2 July 2016 and 8 July 2016 because during this period Twitter saw a huge rise in the discussion on the issue of citizenship and refugees in Syria. The author searched for relevant tweets during the mentioned period with the keywords 'citizenship' and 'Syrian', and downloaded them with the help of a software called Dataminer. In order to systematically arrange the collected tweets, the author listed them in a MS Excel sheet. Out of the listed tweets, every fifth tweet form the list was lifted and listed on a new MS Excel sheet. These remaining tweets were used as the data that the study used for content analysis. Based on an analysis of these tweets, Bozdag (Bozdag, 2019) identified distinct positions taken by people on the issue of refugees and citizenship in Turkey. The study also tries to understand the meanings of tweets which may not otherwise be very clear due to the word limit defined by Twitetr. To do so, the author tries to understand the contexts of such tweets by referring to newspapers, events in the local context, etc. The study further points out that one of the significant limitations of this method is that it runs the risk of including fake accounts in its data corpus (Bozdag, 2019).

Discussion and Conclusion

The above discussion brings to light some of the advantages and limitations of using social media as the site for social science research. Some of the prominent advantages of this method are:

- **Social media provides an easily accessible platform**: Social media provides an easily accessible platform for people to express themselves. It is seen that many people lack the confidence to express their opinions in the public sphere. However, despite the public nature of the social media platforms, people find it a convenient medium to express themselves, perhaps because of the virtual nature of engagement that social media offers. On the other hand, because of the public nature of the platforms, it is convenient for researchers to observe, collect and analyse required data from social media engagements.

- **Analysis thorugh social media is a cost effective method**: From the researcher's perspective, data collection through social media is a non-expensive or a cost-effective way. The essential requirement in order to be able to use social media is an internet connection. Subscriptions to internet connections can be easily purchased at low costs in present times.

- **Analysis through social media saves time**: Data collection through social media is a less time consuming process as it is a computer-assisted process. Further, the use of softwares to collect, organise and store data saves the researcher the time and hassle of physically visiting the field and maintaining notes (in hard copies).

- **Social media provides updated information in no time**: It is seen that not only individuals, but also media houses, news publishers, organisations, etc are active on social media platforms. Thus, any event of significance immediately gets highlighted in social media through different sources. Therefore, this provides researchers with a fast access to the latest news, events, people's opinions on issues, etc.

The discussion of the four studies in the above section brimgs to light some prominent drawbacks of using social media as the site for social science research. The disadvantages limit the use of social media as a scientific tool of data collection and analysis. Some of the disadvantages are discussed below:

- **Quality of data**: Li (Li, 2019) in the sudy on identity issues in Hong Kong has highlighted that there is lack of any quality checking mechanism for the materials or information obtained from social media sites. As a result, the reliability and verifiability of the dtata obtained from social media are under question.

- **Authenticity of users**: Bozdag (Bozdag, 2019) in the study on social media representation of the issue of refugees and citizenship in Turkey states that identification of fake accounts is a major challenge. It is difficult to guarantee the authenticity of identity of the content creators on social media.

- **Maintaining the anonymity of users**: Reillya & Trevisan (Reillya & Trevisan, 2016) in their study on the role of social media in the Flag protests in Northern Ireland, state that they faced the dilemma of whether or not to reveal the identity of the social media users whose opinions (posts, comments, etc.) were considered for the study. While on the one hand, revealing the identity of the users would indicate the transparency adhered to by the researcher. On the other hand, revealing the identity of an user alongside his/ her opinions on an issue may turn to be harmful for him/ her.

- **Consent of users**: Reillya & Trevisan (Reillya & Trevisan, 2016) highlight another dilemma – Whether to take prior consent form the social media users before collection and analysis of data? While taking prior consent may seem to be an objective and ethical method, it however runs the risk of making the users alert and conscious of their activites on social media. As a result, their participation in the social media platforms may be manipulated and guided by concerns of reputational harm, of facing judgements, etc.

- **Representative sample**: Social media may not be a suitable platform for data analysis for researches which require not only a quantitatively sound sample size, but also demands a qualitatively representative sample size. For example, it is challenging to ensure that a

selected sample is representative of a balanced gender dynamics, class backgrounds, religious affiliations, national identities, etc.

- **Language variations**: It is seen that people often write in their native languages on social media. It may be challenging for researchers to obtain translations, understand, code and analyse the data.

The advantages and limitations of using social media as a site for social science research further bring out some important questions that may be of interest for further research. Some questions that research in this area should address in order to be able to make the optimal use of social media platforms are: How to ensure the security (anonymity) of the social media users?; How to identify a respresentative and authentic sample?; How to address the issue of linguistic variations/lack of translations that is commonly found in social media contents?

Acknowledgements

References

Bozdag, C. (2019). Bottom-up nationalism and discrimination on social media: An analysis of the citizenship debate about refugees in Turkey. *European journal of cultural studies, 23(5), 712-730.*

Braun, V., & Clarke, V. (2013). *Successful qualitative research: A practical guide for beginners.* London: Sage.

Davis, J. (1984). Fieldwork. *RAIN, 61, 2-3.*

"Digital 2021 Global Overview Report" by Datareportal: https://datareportal.com/reports/digital-2021-global-overview-report

Everhart, R. (1984). Dilemmas of fieldwork in policy research: A Critique. *Anthropology & Education Quarterly, 15*(3), 252-258.

Li, S. (2019). Native history and nation building on personal online platform: Implications in Hong Kong context. *Social sciences, 8,60.*

Malinowski, B. (1922). *Argonaouts of the western pacific.* George Routledge & Sons.

Reillya, P., Trevisanb, F. (2016). Researching protest on Facebook: developing an ethical stance for the study of Northern Irish flag protest pages. *Information, communication & society 19(3), 419–435.*

Schertzer, R. , Woods, E. (2021). Nationalism: the ethno-nationalist populism of Donald Trump's Twitter communication. *Ethnic and Racial Studies*, *44:7, 1154-1173.*

Smith, A. D. (1986). *The Ethnic Origins of Nations*. Oxford: Wiley Blackwell.

Srinivas, M. (1952). *Religion and society aming the Coorgs of south India*. Oxford: Clarendon Press.

Srinivas, M. N., Shah, A. M., & Ramaswamy, E. A. (2002). *The Fieldworker and the Field: Problems and Challenges in Sociological Investigation* (2nd ed.). Oxford University Press.

"Usage of Information Technology and the Internet by Hong Kong 2000 to 2019" by Census and statistics department: The Government of the Hong Kong special administrative region: https://www.censtatd.gov.hk/en/EIndexbySubject.html?pcode=FA100109&scode=590

Wax, M., & Wax, R. (1980). Fieldwork and the Research Process. *Anthropology and Education Quarterly, 11(1), 29-37.*

Contact email: mkaushik01@qub.ac.uk
              murchana.kaushik@gmail.com

"Three Little Maids" in Occupied Japan:
Domestic Things, The Mikado, and Navy Wife

Nominerdene Enkhbayar, University of Tsukuba, Japan

The Barcelona Conference on Arts, Media & Culture 2021
Official Conference Proceedings

Abstract

This study explores the embedded subplot in a forgotten Hollywood film titled *Navy Wife* (1956), a comedy about three maids in Japan under American occupation. Starring Joan Bennett, *Navy Wife* depicts American domesticity in Occupied Japan, which the three maids undermine. By adopting Robin Bernstein's theory of "scriptive things," this paper examines how a comic subplot emerges from the complex interactions between people and things, characters, and props. The Blain household, the film's main setting, is equipped with the latest electric home appliances imported from the United States, such as vacuum cleaners and refrigerators; however, these domestic machines are completely unfamiliar to the Japanese maids and servants in the household. These streamlined home appliances serve as "scriptive things," and the agency of things shapes or directs human characters' actions, namely those of the Japanese servants and maids, to evoke laughter. I suggest that the comic subplot of *Navy Wife* is loosely based on and significantly rewrites Gilbert and Sullivan's Japanese-themed operetta *The Mikado*, which was performed for the first time in the Ernie Pyle Theater (formerly the Tokyo Takarazuka Theater) in Occupied Japan. *Navy Wife* reinterprets some of *The Mikado*'s female characters, specifically the three little maids. This paper argues that with the introduction of the three maids, the story of *Navy Wife* becomes a topsy-turvy topical satire.

Keywords: Film Studies, Occupied Japan, The Mikado, Three Little Maids

<div align="center">

iafor

The International Academic Forum
www.iafor.org

</div>

Introduction

This paper examines the embedded subplot of the movie *Navy Wife* (Edward Bernds, 1956), a forgotten Hollywood comedy starring Joan Bennett, which is set during the American occupation period in Japan and tells the story of three maids who undermine American domesticity in Occupied Japan. This study adopts Robin Bernstein's "scriptive things" theory to examine the development of a comic subplot through the complex interactions between people and things, characters, and props in *Navy Wife*. The Blain household, the film's primary milieu, possesses the latest electric appliances imported from the United States, such as vacuum cleaners and refrigerators; however, the Japanese maids and servants are unfamiliar with such gadgets. These streamlined home appliances function as "scriptive things" whose agency shapes or directs the actions of the human characters, namely the Japanese servants and maids, inducing laughter.

I suggest that the comic subplot of *Navy Wife* is a loose adaptation and retelling of Gilbert and Sullivan's Japanese-themed operetta *The Mikado*, which was never performed in prewar Imperial Japan but was shown for the first time in the Ernie Pyle Theater (formerly the Tokyo Takarazuka Theater) in Occupied Japan. *Navy Wife* rewrites some of *The Mikado*'s female characters, specifically the three little maids, who use vacuum cleaners in the film instead of paper fans in the operetta. I argue that the three maids transform *Navy Wife* into a chaotic topical satire on the Americanization of the postwar Japanese domestic sphere.

Navy Wife* and *The Mikado

Depicting the adventure of an American citizen in Japan, *Navy Wife* features a postwar rewrite of *The Mikado*. After World War II, navy wife Peg Blain receives a telegram from her husband, Comdr. Jack Blain, asking her and their daughter Debby to join him in Sasebo, Japan, where he has been stationed as a member of the occupation forces. In Japan, Peg arrives at a U.S. House (upper-class residences requisitioned from Japanese owners for Supreme Commander for the Allied Powers [SCAP] officials) called "Dragon Heights," and there she meets the three little maids. Although there appear to be four maids—Akiko, Kimiko, Tomiko, and Reiko—the film emphasizes the existence of only three, excluding Akiko.

The reason for this is linked to Tats Blain's book *Mother-Sir!* (1954), the movie's source literature. Blain was the first American woman to live in the postwar Sasebo village, where her husband worked as part of the occupation forces. In the book, Blain—addressed by her Japanese servants as "mother-sir"—writes her expectations of Japan as follows: "I expected Japan to extend dainty almond fingers to pull me to her breast. I expected a Gilbert & Sullivan operetta on a Willowware plate with a garden, bamboo tree and a couple of maidens-fair in bright kimonos singing me a song of welcome" (Blain, 1954, p. 24). Instead, Blain arrives at a gray harbor with "[n]o gardens, bridges or girls." Upon arriving at Dragon Heights, she *does* encounter some maidens, but they are maids hired through the Japanese government for the residences of SCAP officials.

As Blain frequently mentions the maids in her stories, the maids take on a central role throughout the book. Blain even includes them on the illustrated cover of her book along with her husband and daughter, but it shows only three of the maids instead of the original four. An article in *The West Australian*, titled "Unlike 'The Mikado'" ("Reviews of books in brief," 1954) described how Blain used her disillusionment with Occupied Japan to write a

humorous narrative in *Mother-Sir!* However, Blain's writing suggests otherwise. Despite her disenchantment, she continued reporting her experiences by referring to *The Mikado*.

This is seen in her description of the maids, whom she calls the "Three Fates," a common motif in European polytheism. The name is reminiscent of the "Three Little Maids" from *The Mikado*. The operetta portrays the girls as a playful trio, like the Three Fates, who finds "everything [to be] a source of fun." In describing the house girls, Blain frequently uses words such as "giggly" (as opposed to "chuckle" in the operetta) and "unquenchable amusement." The Three Fates are the products of Blain's initial images of Imperial Japan in *The Mikado* and inform the novel's retelling of the operetta.

Similarly, in *Navy Wife*, Peg's expectation of adventure in Japan (based on representations of prewar Imperial Japan) is displaced onto Occupied Japan. After receiving Jack's telegram, Peg undergoes a battery of preventative vaccines and, in the process, hallucinates herself, Jack, and Debby at a small Japanese garden with a bridge and a river, clothed in traditional Japanese kimono, and accepting a drink from a young Japanese maid in celebration of their arrival to Japan.

The film also uses the images of *The Mikado*'s Japan to portray Occupied Japan. Instead of *a* maid, the housing authority provides Peg with multiple housemaids at Dragon Heights. She had initially planned to hire two, Akiko and Tomiko, but when another maid, Kimiko, insists that Peg recruit three of them (Reiko, Tomiko, and Kimiko) because they always "work together," Peg reluctantly agrees. Through this event, the film features a *trio* of maids instead of a duo, which would have invalidated the movie's reference to the operetta, and Kimiko's comment explains the movie's unusual emphasis on the three maids.

Both the film and the novel's reference to *The Mikado* is not surprising; "for countless people who had never been to Japan, never met anyone of Japanese descent, or never seen or heard anything of Japanese culture (as well as for many who had done all of those things), *The Mikado* served as the basis of knowledge of what 'Japanese' meant" (Lee, 2010, p. viii). Before becoming a Hollywood producer, Walter Wanger, who produced the film, had worked in theater, also as a producer. Hence, it is not an exaggeration to say that *The Mikado*'s readaptation in *Navy Wife* comes naturally.

Nevertheless, *Navy Wife* does not authentically represent Japan or its inhabitants. According to Ken Provencher, the goal of 1950s productions in Japan was not to capture the genuineness of Japanese locations but rather to "frame locations as authentically—that is to say, exotically—Japanese" (Provencher, 2014, p. 44). Although *Navy Wife* includes some footage of Tokyo streets shot on location, the entire movie was shot in a Hollywood studio. It does not seek to truly represent Occupied Japan not necessarily because of a lack of desire but perhaps out of a lack of resources. *Navy Wife* was made outside the big studios with a small budget and a timeline but with increased creative freedom. The film rewrites *The Mikado* by infusing the familiar characters (to Western audiences) of the three little maids with the theme of "Occupied Japan" to form a humorous subplot within its narrative.

"Scriptive Things" and Subversive Laughter

The three little maids and their mistress generate laughter within the movie with the help of various Western domestic appliances functioning as "scriptive things." Examining the difference between things and objects, Robin Bernstein (2009, p. 70) writes, "At the deepest

ontological level (. . .) performance is what distinguishes an object from a thing." Bernstein argues that things, not objects, script actions. The nonconventional background of *Navy Wife*, the requisitioned house, and its servants' everyday physical encounters with the modern Western home appliances script the film's comical, dramatic exchange, an *interracial female farce*, between the American mistress and Japanese subjects.

The material *things* of the Blain household must be analyzed in conjunction with the Japanese characters, as they inform each other's existence within the narrative. Professions such as maids were a new type of employment created in the wake of the occupation. The livelihood of Japanese maids depended not only on their relationships with their mistresses but also on their ability to command and operate the various machines that constitute the domestic (and hence gendered) spaces of U.S. Houses. In *Navy Wife*, the Japanese female characters and their interactions with *things* necessarily form a female-to-female relationship that reshapes their connection with their mistress, Peg.

Early reviews and subsequent writers viewed the comicality of *Navy Wife* from the perspective of cultural misunderstandings. Newspaper reviews saw the film as a humorous take on life in postwar Japan. The *Frontier* described it as "the most hilarious scramble a woman got into since 'The Egg and I'" ("Navy Wife," 1956), while the *St. Louis Register* stated that "[t]he customs are amusing, backgrounds are colorful and the acting of both principals and supporting Japanese cast is quite good" (Mooring, 1956). Meanwhile, film historian Matthew Bernstein used the word "mediocre" to describe the film, writing, "[T]he film was a talky situation comedy that exploited misunderstandings between Americans and Japanese" (Bernstein, 2000, p. 314).

Be that as it may, cultural misunderstandings between Americans and the Japanese are not the only factor that helps deliver the film's humorous plot. One important comical element in the film is the relation between people and things, characters, and props in the mise-en-scène. Despite being described in the film as handy, the American home appliances are ultimately characterized by their insubordination to humans. In a scene where all the servants gather in the kitchen to inspect the newly arrived gadgets, one maid takes the initiative to open a cooker and says, "*Sugoiwane*," which in Japanese means "amazing." The younger cook notes, "What a beautiful kitchen!" and another maid says, "Everything new, cost much money," all applauding the generosity of Uncle Sam. Things take an unexpected turn, however, when the servants try to use the appliances.

Because of the servants' unfamiliarity with the Western lifestyle, catastrophic events occur unless Peg individually supervises their every action. The servants of the Blain household wreak havoc, for instance, by putting a block of ice inside a refrigerator and burning a shirt. Sometimes the structure of the house itself just does not seem to cooperate; for instance, because the house runs on faulty current, when Sato, the young male cook, forgets the correct order of turning on the appliances, the electric outlet in the kitchen explodes. In another instance, also because of unstable electricity, when Peg tries to plug the vacuum cord to teach the maids how to use it, the outlet blows up yet again. Peg and the maids jump almost theatrically in response to this spectacle-like event. Worth noting is that more often than not, these scripts of *interracial female farce*—seemingly meaningless actions that have little to do with the main narrative—cause the American mistress to be ridiculed by the Japanese maids. After the vacuum cleaner episode, the laughing maids mock Peg, who made the same mistake as Sato, by saying, "mother-sir forget, should unplug refrigerator before inplug hoover."

The movie portrays Japanese servants as harmless and clueless characters who speak pidgin-like English and are fundamentally incompatible with the Western lifestyle because of their inability to command simple electric home appliances. Nevertheless, despite the ridiculous depiction of these Japanese characters, the subject of laughter is ultimately the American occupiers.

Conclusion

The comical elements of *Navy Wife* are characterized not only by the misunderstandings between American and Japanese cultures caused by a displacement not only of *people* but also of *things* and by a reimagination of the enduring tale of *The Mikado* in the context of "Occupied Japan."

References

Bernstein, M. (2000). *Walter Wanger: Hollywood independent*. University of Minnesota Press.

Bernstein, R. (2009). Dances with things: Material culture and the performance of race. *Social Text*, *27*(4), 67–94. https://doi.org/10.1215/01642472-2009-055

Blain, T. (1954). *Mother-sir!* Charles E. Tuttle Company.

Gilbert, W. S., & Sullivan, A. (2015). *The Mikado* (S. Appelbaum & P. Smith, Eds.) [Musical score]. Dover Publications. (Original work published in 1885)

Lee, J. (2010). *The Japan of pure invention: Gilbert and Sullivan's The Mikado*. University of Minnesota Press.

Mooring, W. (1956, June 22). "Hollywood in focus." *St. Louis Register*, p. 8.

"Navy Wife." (1956, October 4). *Frontier*. p. 7.

Provencher, K. (2014). Bizarre beauty: 1950s runaway production in Japan. *Velvet Light Trap*, *73*, 39–50. https://doi.org/10.7560/VLT7304

"Reviews of books in brief." (1954, November 6). *The West Australian*, p. 23.

Wanger, W. (Producer), & Bernds, E. (Director). (1956). *Navy Wife* [Motion picture]. United States: Allied Artists Pictures Corp.

Contact email: nr_2411@yahoo.com

Exploring Physical Stores In Omnichannel Retail Strategy:
How Interaction Design Is Changing In-Store Behavior

Francesca Fontana, Università di Camerino, Italy
Manuel Scortichini, Università di Camerino, Italy

The Barcelona Conference on Arts, Media & Culture 2021
Official Conference Proceedings

Abstract

The research investigates the use of interaction design in retail environments in the current omnichannel scenario, where many different coordinated retail channels operate simultaneously. The growth of online shopping forced retailers to look for a new meaning of brick-and-mortar stores in which customer experience is more relevant than making a purchase. Today, where the transaction happens is not relevant anymore, the shop is the place where to trigger stimuli that are impossible to find online. One approach to improving the retail shopping experience is to integrate the physical dimension with digital interactive devices, amplifying both brand awareness and product placement. While any studies have been conducted on in-store technology and *retailtainment* (Codeluppi, 2000) within the marketing field, little has been said from the designers' perspective about what kind of technologies are enabling innovation, and how they are related to the physical space of the store. In order to fill this gap, this research has been carried out to highlight the latest avant-garde in design and propose a vision for the near future. Through the analysis of some significant examples, this work shows how shops are becoming more design-oriented, hyper-connected and experience-driven. In a dynamic environment such as retail, and in a fast-evolving sector such as digital interaction design, this research aims to frame the current scenario, pointing out interesting trends and showing the way for future development.

Keywords: Experiential Retail, Interaction Design, Retail Design, Shopping Experience, Omnichannel

iafor

The International Academic Forum
www.iafor.org

Introduction

In the last decades, the spread of internet and digital technologies had an enormous influence on many fields of our lives. The retail sector is for sure one of those that have been impacted the most from this introduction. In fact, the emergence of internet-based purchase channels is considered, among the last innovations in retail, the most significant one (Alexander & Blazquez Cano, 2020).

A key player in this revolution is the wide diffusion of internet-enabled devices. The technological advancements of last years have transformed these devices from heavy, bulky and complicated computers to tiny, light and easy-to-use tablets and mobile phones, multiplying their possibilities of application and displacement. The availability of these products (at least their entry-level models) at increasingly competitive prices, has determined their diffusion on a broader basis among the population (Perry et al., 2019). All these factors have contributed to making today's consumers quite confident in using internet platforms for many purposes, including carrying out a purchase or any operation involved in the purchase activity.

Since its first appearance, internet has evolved greatly both in objective, dissemination and supporting technology. The online universe is in continuous expansion as currently shown by its circulation through devices such as smartphones and tablets, apps, gaming platforms and metaverse (most recently), and social networks. This multiplicity of virtual media reflects on the retail sector allowing as many purchasing options.

The increasing consumers' shift towards virtual channels, recently accelerated by the covid-19 pandemic, is making retailers questioning the purpose of physical store within this new, hyperconnected reality. Recent studies (Chen, 2020; Iannilli & Spagnoli, 2021) on the role of the brick-and-mortar store within the current retail panorama, agree on the fact that it is not disappearing, but facing a transformation in order to keep the pace of evolving purchasing methods and consumption models. Within this new context, the store is changing from being a place that simply provides products to buy, to being a place that provides experiences, regardless of where (or whether) the purchase is going to happen in the end (Chen, 2020). Since familiarity with digital devices grows among population, interactive technology is today recognized as a useful tool to provide a satisfactory customer experience, augmenting customers' engagement through their shopping journey.

In such a fast-evolving scenario, the purpose of this paper is to examine the role of technology and interactive digital devices in influencing clients in-store behavior and, from a designers' point of view, to understand how these new features are shaping the architectural space of the store of the future. The research identifies three significant case studies, belonging to different retail sectors, that show a successful digital integration of the physical store and an improved customer involvement using different interactive devices.

Physical Stores in the Omnichannel Strategy

While only few years ago online shopping was considered a threat to the survival of the physical store (Pratte et al., 2014), today it is possible to affirm that this danger is not yet on the horizon. In fact, most of the retail sales are still taking place in physical stores (Iannilli & Spagnoli, 2021), reaffirming the importance of this channel even in a period of such rapid digital transformations.

What is happening nowadays is that material and immaterial purchase channels are becoming complementary parts of a broader, more articulated approach to retailing: omnichannel (Blázquez, 2014). Within the omnichannel strategy, different entities like physical stores and virtual platforms (web pages, apps, social networks…) are no longer considered as different channels, but as parts of one interconnected system that operate in a new fluid dimension. The goal is to eliminate the distinction between different channels, making all of them operate together as a whole. This allows clients to take advantage of each channel's strong point (Alexander & Alvarado, 2014), experiencing a more consistent shopping journey that encompasses all of them. An example of a frequent customer shopping pattern is browsing products online and then purchasing them in the shop or vice versa. The ability to switch easily and quickly between mediums meets the purchasing expectations of the contemporary consumer. The aim to create a coherent and seamless shopping experience between online and offline channels, leads also to losing the connection between the shopping activity and the specific place (be it tangible or intangible) where this activity is happening, enhancing instead a more direct relation with the brand (Bonetti & Perry, 2017).

Blurring the boundaries between different channels, online shopping is assuming functions that once were provided only by the brick-and-mortar store, forcing the latter to look for a renovated significance to fit into the new omnichannel panorama. Despite a continuous shift towards digital media, the physical store maintains its centrality as the space that allows interaction between the client, the product, and the environment. The material presence of the store, opposed to the immateriality of virtual media, allows physical interactions that are quite difficult to recreate online, particularly in the field of fashion, where trying on a product is fundamental to understand how it fits. For this reason, the store is still necessary, and it is the perfect complement for digital purchase channels. The store has now the opportunity to develop its full potential as a place for spatial experimentation (Chen, 2020), an essential touchpoint for generating memorable shopping experiences, also helped by digital interactive technologies.

Shaping in-Store Experience with Interaction Design

Considering shopping as a leisure activity and not a necessity anymore, the focus has shifted from the purchase of the material product to the provision of a satisfactory experience (Gehring et al., 2011). Store atmosphere is widely recognized as a factor that has a profound influence on shopping experience and, consequently, the careful design of the retail ambience can positively affect customer's decision-making process (Kotler, 1974).

Before the digital revolution, the shopping activity inside physical stores was usually enhanced with an accurate design of the interiors, showing products in museum-like settings, providing relaxing areas or in-store cafes. Customer experience was a top-down process, controlled by the retailer. Today, increasingly digital-confident consumers have higher expectations and seek for a wider variety of stimuli such as information, suggestions, usability, customization, engagement, thus inducing retailers to pay great attention in the design of a fulfilling shopping journey across each channel through which they operate. The kind of experience that a physical store must provide nowadays comprises inclusion and participation, it must not offer a static experience but a dynamic one, in which clients can be active creators of their own shopping journey. Technological internet-enabled devices, thanks to their current degree of development and availability, have a significant weight both in fostering this demand and in providing the instruments to fulfill it. Through these resources, the traditional point-of-sale is implemented in order to enhance its physical dimension,

blending it with the virtual one. Retail design intervenes in this transformation transposing virtual stimuli into the offline world, turning the shop into a more interactive environment with the use of innovative devices that confer added value to the space (Iannilli & Spagnoli, 2021).

A well-integrated system can contribute to shaping customers' experience during all the phases of the shopping process. The first in-store interactions are related to the provision of information and suggestions or to the induction of a desire. Digital panels or interactive screens are both useful in providing product information to clients and in stimulating their will to make a purchase through advertising and recommendations. During the purchase, technological tools intervene influencing costumers through personalized advice, giving price, availability information, and simplifying buying operations. The first goals are often achieved with digital signages and info-points or providing products with a Quick Response (QR) code or a scannable tag that can be read by a specific in-store device or by customers' smartphones. Regarding the second one, self-check-out machines or buy-online devices allow clients to speed up the payment phase, thus decreasing friction and frustration and improving the overall shopping experience. A difficult challenge for retailers is to hold clients inside the store once the sale is completed, to extend customers' journey beyond their shopping activity in order to establish brand loyalty. To this end, interactive platforms can still play a fundamental role. In fact, all kind of devices providing social media interfaces of feedback options, might be used to keep the clients engaged and active inside the shop space after the purchase, encouraging them to share or comment their experience. Giving value to consumers' opinion is crucial to successfully conclude the shopping journey, making them feel important and considered, and contributing to captivating new customers if the comments or information shared are positive (Bonetti & Perry, 2017).

Digital elements that offer an interaction with the client are integrated inside the physical store in many different ways and can perform a multitude of functions that improve shopping experience and customer's satisfaction. Information can be accessed through connected devices such as screens or tablets or can be provided through scannable tags. Suggestions, advertising, and other hedonic stimuli are conveyed through digital mirrors, videos, or beacon technology. The purchase activity can be improved with the aid of technological tools like self-check-out cashier, i-Kiosks, interfaces set up to allow online purchases. Through all these media, shoppers can independently interact with the product and/or with the brand and participate in creating their own shopping experience, which may start in-store, but can continue elsewhere thanks to digital integration (Bonetti & Perry, 2017).

Case Studies

The physical reality of a retail store evolves constantly. As a result, it is possible to find a broad panorama of exhibit design strategies, guided by different communicative purposes. Retailers are increasingly interested in incorporating new technologies into their stores, with the intent of being more competitive with other companies and to provide a contemporary shopping experience. The user experience must benefit the customers and encourage them to return to the store, ideally combining the best of physical engagement and online services. After a careful review of literature, an in-depth research was carried out to determine significant case-studies, in different market sectors, in which interaction design is applied in the most innovative and effective way. The selected case studies are the Burberry Social Store in Shenzen, the Google Store Chelsea in New York, and Hema supermarkets in China.

It is interesting to point out that two out of three cases are located in China, due to a generally higher level of confidence in the use of technology among Eastern consumers.

Burberry Social Store

In July 2020, the British fashion brand Burberry opened a forward-looking flagship store in Shenzhen, China. The 5,800-square-foot store is specifically designed to blend the physical experience with the digital dimension, embedding social media engagement into the flagship space for a digitally immersive costumer journey.

The central element that enables interaction inside the store is the smartphone. The instant communication platform WeChat has been upgraded by its developer Tencent Technology with a dedicated mini program that works as a bespoke digital companion for Burberry Shenzhen customers. Inside the shop, clients are encouraged to interact with the space in order to discover additional contents and share their experiences online. All the products and some specific areas inside the venue features QR codes that, once scanned, display information and extra contents both on clients' personal devices and on the closest digital screen among the numerous inside the store, enhancing Burberry's narrative through a multimedia responsive storytelling. Burberry Shenzhen social platform is a complex and articulated digital ecosystem where customers can earn a social currency as a reward, impersonating in animal avatars that evolve over time like a video game character. Clients are paid back for interacting inside the store or playing through their avatars to videogames provided on the app. The earned virtual currency is used to unlock exclusive contents that can be both physical (exclusive dishes at the in-store Thomas's Café) or digital (avatar outfits, unlocking new items on the application).

The concept behind this innovative store is the idea of *Social Retail*: rewarding customers for engaging with the brand both online and in-store, creating a plus to traditional retail by using the soft power of gamification. According to Mark Morris, Burberry senior vice president of digital commerce, "Social media is an increasingly important part of the customer journey and the interaction between social media and physical surroundings is ever more seamless, our social retail store in Shenzhen is our response to this. It is a space where the social and physical worlds merge, taking interactions from social media and bringing them into the physical retail environment" (Block, 2020).

Google Store NYC

In June 2021, the giant tech company Google unveiled its first permanent store in New York City, after experimenting with pop-up stores in the last years. Google Store occupies the ground-floor of the former Port Authority Building that houses the company's office on the upper levels.

Unlike other tech companies, the store, designed by Reddymade Architecture, does not feature a minimalist and hyper technological aesthetic. The venue is a relatively small space, characterized by a warm atmosphere, that aims at creating a friendly, comfortable, and homey environment. The project achieved the LEED Platinum certification, a rating system that certifies green buildings, thanks to a careful selection of sustainable materials such as recycled flooring, cork furniture and wood panelling: every detail contributes to communicating Google's philosophy and to enhance its narrative. The store's concept is strongly influenced by 'A Space for Being', a previous research conducted with Reddymade

Architecture, Muuto and Johns Hopkins University to create an exhibition at Milan's Salone del Mobile 2019, focused on how the aesthetic experience of the surrounding space have the potential to impact our health and well-being (Scarano, 2019).

Along the external perimeter of the store, large windows create a close relationship with the street, allowing passers-by to interact with screens installed on them and to feel as if they were inside the store. Through their smartphones, people can visualize augmented reality contents related to different Google products without even entering the shop. Once inside the store, customers are able to experience how Google's products and services work together in real-life scenarios. The internal space is divided in thematic rooms called *sandboxes*, an evocative naming that explicitly refers to the act of playing. One of them is the Nest Sandbox, a simulated living room where it is possible to see how all Nest devices work together. In this space, clients are immersed in a domestic environment where they can interact with the domotic system powered by Google. Another sandbox is the Pixel one, a dark room with a site-specific light installation where it is possible to test the newest Pixel smartphone by taking group selfies. The only area of the store in which hi-tech performance is clearly highlighted is the Google Imagination Space, a seventeen-foot-tall installation characterized by a semi-circular structure made of cylindric glasses, with three vertical interactive screens installed inside. There, customers can simultaneously view a real-time translation of their speech into twenty-four languages, while a dynamic data visualization explains the machine learning capabilities behind the famous Google Translate software.

In this store, Google exhibits its vision of the 21st century where people return at the centre. The setting emphasizes the possibility of human-to-human interactions mediated, but not overcome, by technological devices that must integrate discretely.

Hema and Alibaba's New Retail Concept

In 2016, Jack Ma, founder of the e-commerce giant Alibaba Group, coined the term *New Retail* to describe his vision for the future of retail, which is not about a total domination of e-commerce, but consists in the complete digitalization of all commerce typologies. In his opinion, the key to keep physical retail alive is to integrate both dimensions in a single hybrid system, not only in terms of customer interface, but also in terms of services, logistics, and data, providing a better shopping experience tailored to each client. The New Retail concept represents a pillar of Alibaba's strategy to spread its services ecosystem from China to the rest of the world. According to Daniel Zhang, CEO of Alibaba Group, "Physical stores serve an indispensable role during the consumer journey and should be enhanced through data-driven technology and personalized services in the digital economy. By fully integrating online and physical channels together with our partners, we look forward to delivering an original and delightful shopping experience to Chinese consumers." (Wang & Coe, 2021).

Alibaba's project to expand in the large-distribution field is achieved through Hema, a new high-tech supermarkets chain. Since 2016, when the first Hema store opened in Xiansheng, the brand is rapidly expanding, counting to reach more than 2000 stores by 2023 (Wang & Coe, 2021). Compared with similar examples in Western countries, like the Amazon Go stores, the growth of Hema is impressive in terms of numbers (McKinnon, 2021). The whole shopping experience is built around the customer's smartphone, eliminating the need for nearly any other form of in-store equipment. Every action is controlled by Hema smartphone app: once customers have logged in, they can scan products with their phone to add them to the purchasing list, scan QR codes on price tags to get product information, receipts, or

recommendations. Since Chinese customers are particularly concerned about the freshness of their food, Hema app provides an individual web page for each product where much information is recorded, such as the product origin, the company name and background, transportation information, food safety certificates, ingredients, recipes suggestions, buyer reviews and so on. Shopping experience is improved also thanks to digital payment devices that speed up the purchase process, thus making it less stressful. The check out is linked to Alipay, a payment system provided by Alibaba that allows a completely cashless service through self-check-out devices, including also looking forward methods like payment by facial recognition.

The purchase activity in Hema is mainly driven by the interaction with its own smartphone application, allowing the client to reach a large amount of information without creating an overwhelming visual communication inside the store. The digital dimension is overlayed on the physical one, making the online experience a part of the in-store purchase process. Eliminating discontinuity in the perception of virtual and physical purchase, Hema provides to its clients a more coherent shopping journey compared to other competitors.

Conclusion

The case studies presented above show how digital interactive technology can be effectively introduced in physical stores in order to enhance consumer's shopping experience, creating a *phygital* reality where online and offline dimensions merge into a hybrid new one. The research highlights that there is not a standard to follow when integrating digital devices into the point-of-sale, instead retailers are currently showing that there is a multitude of different possibilities to face this new challenge. This multiplicity of choices is due to a proliferation of technological devices that have been lately developed and can be applied for this purpose, but it depends also on factors such as the product category, the brand values, and the average consumer attitude. As a consequence, the best practices described in the paper show that also the experiences provided by these digital interactive devices are not all the same.

Within the Burberry store, the accent is on the social dimension of interaction. The specifically designed app, the gamification of the experience, the reward for taking an active role inside the shop: all these features insist on a "social network" vision of the store, which is designed accordingly. Inside the Google Store, the client is immersed in a universe in which every action is actually a direct interaction with the space, which is set to provide an immersive experience, aiming at recreating the environments in which the products might be used at home. Hema supermarkets are instead an example of how the implementation of interactions inside a store can positively affect the shopping experience also from a practical point of view. The innovations introduced in these grocery stores, in fact, do not provide additional services or particular experiences but support clients through their purchase activity making it easier, informed and thus more enjoyable.

While the case studies show multiple good ways to integrate interactive digital devices into physical stores, it is also necessary to highlight that the retail universe is not united along the way to technological implementation. The cost for digital transformation, which means to create an expensive physical and digital infrastructure, is affordable only by wealthy companies. In addition, some brands (but they are becoming less and less) are linked to a more traditional image and prefer to reduce digital innovation in order to preserve their identity (Bonetti & Perry, 2017). This means that the retail environment is splitting between big and forward-thinking brands that are already investing into the design of hybrid spaces,

stores of the future, and small and medium companies or more traditional brands, that are evolving at a quite slower pace. Another important point to report is that, despite the best practices shown in this work, it often happens that retailers struggle to understand how to effectively combine the physical and the virtual dimensions. It is common to find a lack of awareness in the use of interactive devices, that are often introduced as hi-tech pieces of furniture without fully exploiting their potential, which means not only to install technological interfaces inside the store, but also to improve logistics, services, and all supportive infrastructures. This means that, even if people are increasingly confident in shopping online and using in-store technology, they might not always benefit from these features as an effective permeation of physical and virtual realms is not always fully accomplished.

An important fact that emerges from the analysis of these case studies, and, more generally, from the existing literature, is the growing predominance of smartphones as a tool of digital interaction inside the store. Mobile phones have become the preferred medium to browse on the internet for a few years already, surpassing personal computers for the first time at the end of 2016 (StatCounter, 2016), and their usage for purchase purposes is constantly increasing. The act of consulting the personal device while shopping is becoming more and more common among customers, a fact that represents a great opportunity for retailers to get the virtual and the physical world closer, to accelerate digitalization, and to enhance store interactivity. Clients willing to use their smartphone inside the store reduce the need to install additional equipment. In fact, personal device, through specific apps or interfaces, allows to provide supplementary services, information, and suggestions creating engagement, enabling contents, fostering interaction. Customers are pushed to reconsider the dimension in which their shopping journey is happening, that is at the same time material (physical interaction inside the store) and immaterial (digital interaction on online channels). The usage of the smartphone as an in-store interactive tool creates continuity from physical to virtual purchase operations, allowing clients to save information acquired during the store visit and to review them in a different moment and place, resuming the shopping activity when already out of the store, and expanding the shopping experience in place and time.

The current scenario is still evolving since digital and interactive technology is being constantly upgraded. It is then quite difficult to clearly indicate a path for future development, even if, as illustrated through the selected best practices, some interventions seem quite promising. What is clearly emerging is that the separation between the virtual and the physical dimensions is more and more blurred, and that their integration is becoming stronger each day.

In order to get a more complete vision, it would be helpful to support the theoretical research with interviews to clients, retailers, and designers, collecting insights from the subjects that deal with these spaces most frequently. A continuous update of the technical advancements, combined with feedbacks from different type of users, could be an effective method to understand such a dynamic situation and an interesting field for further investigation.

References

Alexander, B., & Alvarado, D. O. (2014). Blurring of the channel boundaries: The impact of advanced technologies in the physical fashion store on consumer experience. *International Journal of Advanced Information Science and Technology (IJAIST)*, *30*, 29–42.

Alexander, B., & Blazquez Cano, M. (2020). Store of the future: Towards a (re)invention and (re)imagination of physical store space in an omnichannel context. *Journal of Retailing and Consumer Services*, *55*, 101913. https://doi.org/10.1016/j.jretconser.2019.101913

Blázquez, M. (2014). Fashion Shopping in Multichannel Retail: The Role of Technology in Enhancing the Customer Experience. *International Journal of Electronic Commerce*, *18*(4), 97–116. https://doi.org/10.2753/JEC1086-4415180404

Block, I. (2020). Burberry and Tencent collaborate on interactive WeChat shop in Shenzhen. *Dezeen*. Retrieved December 2021, from https://www.dezeen.com/2020/08/02/burberry-tencent-wechat-shop-shenzhen/

Bonetti, F., & Perry, P. (2017). A Review of Consumer-Facing Digital Technologies Across Different Types of Fashion Store Formats. In A. Vecchi (Ed.), *Advanced Fashion Technology and Operations Management* (pp. 137–163). IGI Global. https://doi.org/10.4018/978-1-5225-1865-5.ch006

Chen, C. (2020). Tapping into the Future of Physical Retail. *The Business of Fashion*, 1–19.

Codeluppi, V. (2000). Lo Spettacolo della Merce. Milan: Bompiani.

Gehring, S., Löchtefeld, M., Magerkurth, C., Nurmi, P., & Michahelles, F. (2011). Workshop on mobile interaction in retail environments (MIRE). *Proceedings of the 13th International Conference on Human Computer Interaction with Mobile Devices and Services - MobileHCI '11*, 729. https://doi.org/10.1145/2037373.2037499

Iannilli, V. M., & Spagnoli, A. (2021). Phygital Retailing in Fashion. Experiences, Opportunities and Innovation Trajectories. *ZoneModa Journal*, 43–69. https://doi.org/10.6092/ISSN.2611-0563/13120

Kotler, P. (1974). Atmospherics as a Marketing Tool. *Journal of Retailing*, *49*, 48–64.

McKinnon, T. (2021). The Future of Retail: 9 Ways Alibaba is Redefining Retail Stores. *Indigo9Digital*. Retrieved December 2021, from https://www.indigo9digital.com/blog/futureofretailalibaba

Perry, P., Kent, A., & Bonetti, F. (2019). The Use of Mobile Technologies in Physical Stores: The Case of Fashion Retailing. In W. Piotrowicz & R. Cuthbertson (Eds.), *Exploring Omnichannel Retailing: Common Expectations and Diverse Realities* (pp. 169–195). Springer International Publishing. https://doi.org/10.1007/978-3-319-98273-1_8

Pratte, S., Seyed, T., & Maurer, F. (2014). Exploring Multi-Surface Interactions in Retail Environments. *Proceedings of the Ninth ACM International Conference on Interactive Tabletops and Surfaces - ITS '14*, 393–398. https://doi.org/10.1145/2669485.2669552

Scarano, A. (2019). Google invites you to feel more (and to be conscious about it). *Domus*. Retrieved December 2021, from https://www.domusweb.it/en/events/salone-del-mobile/Salone-Interviews/2019/google-invites-you-to-feel-more-and-to-be-conscious-about-it.html

StatCounter. (2016). *Mobile and tablet internet usage exceeds desktop for first time worldwide*. StatCounter Global Stats. Retrieved December 2021, from https://gs.statcounter.com/press/mobile-and-tablet-internet-usage-exceeds-desktop-for-first-time-worldwide

Wang, Y., & Coe, N. M. (2021). Platform ecosystems and digital innovation in food retailing: Exploring the rise of Hema in China. *Geoforum*, *126*, 310–321. https://doi.org/10.1016/j.geoforum.2021.08.007

Contact email: francesca.fontana@unicam.it
                     manuel.scortichini@unicam.it