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INFLUENCE OF PARENTING STYLE ON ADOLESCENT SOCIAL VALUE ORIENTATION IN AMUWO-ODOFIN LOCAL GOVERNMENT AREA OF LAGOS STATE, NIGERIA

OLUBUKOLA LONGE[1], AND OMOHOSEMEN ENWEREM[2]

ABSTRACT

This study examined the influence of parenting style on adolescent social value orientation in Amuwo-Odofin Local Government Area of Lagos State. Effort was also made to assess how adolescents view parental behaviours attachment and how this perception affects their value orientation. In order to achieve this set objective a descriptive survey with 150 participants drawn through random sampling comprising of 75 male and 75 female students senior secondary school two (SS II) students were selected from four public schools. The findings of the study revealed that there was significant influence of each of the three parenting styles (authoritative, authoritarian and permissive) on value orientation of adolescents. Based on these findings, it is recommended that parents should be educated on the importance of adopting the parenting social style that would aid in promoting their children's development.

Key Words: Parenting style, adolescents, social value orientation

INTRODUCTION

The pivotal role that parents play in a child's development is undisputed. The training given to a child, to a large extent determines his or her value orientation. The parenting styles of individual also determine how the child will adjust to the society. There are different parenting types and they have a way of affecting the value orientation of individual adolescents and their adjustment in the society. The parenting styles goes a long way in determining how an individual sees his or herself, perception concerning his or her physical, social and psychological aspiration and adjustment in the society in which he or she lives. It is therefore important to study the different parenting styles and ascertain how they determine the social value orientation of the individual adolescent.

Parenting plays very crucial roles in adolescents' transition to adulthood (Okorodudu, 2010). Parenting has been recognized as a major vehicle in socializing the child. For example, harsh and inconsistent parenting is considered the main cause of conduct disorders. Children at adolescence stage require parental love, care, warmth and serious attention to adjust adequately, in the environment in which he/she finds him/herself. Parents have major roles to play in the adjustment process of adolescent with different parenting styles categorized under three major forms: the authoritarian, the authoritative or democratic, and the permissive or laissez-faire or self indulgence or un-involving. Authoritarian parents believe that children are by nature self-willed and self-indulgent and therefore see their primary job to be bending the will of the child to that of authority (Darling, 2014). Compliance and conformity to parental authority and respect are the hallmarks of this parenting style whereas authoritative parents are issue-oriented and pragmatic rather than motivated by an external, absolute standing. They tend to adjust their expectations to the needs of the child and listen to the child's arguments. They balance the responsibility of the children to conform to the needs and demands of elders with the rights of

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the children to be respected and have their own needs met. The permissive parents however, are responsive but make few rules and little or no controls are exerted over the children.

Adolescence being the transition between childhood and adulthood is a period of multiple transition involving education, training, employment, unemployment and other developmental issues (Osenweugwor, 2016). Over the years, researchers have shown that parenting styles have strong impact on children's and adolescents' development. This is because the family is the first and most important socialising agency of individuals and parents in particular, play important roles in shaping the personality of individuals. In everyday life value orientation of adolescents is reflected in their opinions and attitudes towards themselves and toward their surroundings. It also influences their overall behaviour and actions. The issue of values and social value orientation become urgent majorly in connection with an increasing rate of juvenile crime compared with the overall crime rate in a society, decreasing age of persons with socio-pathological behaviour in educational environment of schools, in connection with a preference of materialistic and consumeristic way of life and with the crises of family (Sirotova & Droscak, 2015). Today, value as a term becomes one of the most complex and at the same time the most problematic notions. At present, it is used as a conscious or unconscious category of the thing that is considered desirable in society, in relationships, in family and in education.

However, the term value orientation principally means a tendency of a personality toward certain value attitudes and reflected mainly through actions and behaviour (Sirotova & Droscak, 2015). Through it we can assume an individual's social role or status, his/her communication competencies, axiological processes and the degree of the development of personal competencies. Value orientation manifests itself in the basic attributes of behaviour: in motivation, readiness to act and in an act manifested in the activity itself.

Since parental roles are essentially important in the formative stage, their influence in the value orientation of children cannot be over-emphasised. Research has found that the best adjusted children, especially in terms of social competence, have parents with an authoritative parenting role. These parents are able to balance high demands with emotional responsiveness and respect for their children's autonomy (Vijila, Jose & Pennusamy, 2013).

Authoritative parents have high expectations of their children and use control, but the strict parent expects the child to unquestioningly accept parental judgments and allows the child little freedom of expression (Vijila, et al., 2013). Children of strict parents are apt to be reliant on the voice of authority and to be lacking in spontaneity. The authoritative parents permit the child enough freedom of expression so that he or she can develop a sense of independence. Permissive parent makes few demands and their children have been found to have difficulty controlling their impulses and can be immature and reluctant to accept responsibility. The way parents interact with their children has a direct effect on their development such as their level of confidence and self-esteem, their sense of security, their emotional well-being, the way they relate to others, how they deal with authority, and their performance in school (Laxmi and Kadapatti, 2012). Hence, it's the overall pattern of interactions rather than one single act that shapes a child's behaviour. Parents consistently play an important role in adolescents' life. Thus, it is important to examine the type of parenting style and its effect on adolescents' social value orientation in order to gain valuable insights that would help to nurture self sufficient future adults.

Statement of Problem

The way and manner children are brought up is reckoned to be very essential to the development of the growing child. This underscores the assertion that parenting is an important determinant which affects the whole child. The way parents take care of their children impacts on the latter's personality development and their ways of interacting with social and close relations. Many parents tend to believe that the best way to bring up and rear a child especially the adolescent is by being oppressive, a commander, an authoritarian and autocratic. These parents believe

that the adolescent should carry out all instructions as commanded, yet another set believe that they should be permissive or negligent as parents such parenting style result in maladjustment.

There is a general agreement among scholars around the world from developing as well as developed nations that early childhood rearing and training are not only desirable but essential for the value orientation of the children. A tremendous amount of research reveals that children are at risk of developing antisocial behaviours when they are exposed to ineffective parenting with poor supervision, rejection, or harsh and inconsistent discipline.

However, majority of past studies investigated the influence of parenting styles on children's academic performance at school. There is, however, dearth of data on the influence of parenting styles on students' social value orientation which is considered a non-academic gain. Existing studies have mainly assessed the influence of parenting styles on the academic trajectory of students' learning outcomes virtually oblivious of students' social development. Meanwhile, the development of competent social skills of students is an objective of education. Students who go through formal education are expected to be competent both academically and socially. Given the apparent significance of the need to be socially competent at school and at the world of work, it was deemed worthwhile investigating the influence of parenting style on adolescents' value orientation.

Purpose of the Study

The purpose of the study is to examine the influence of parenting style on adolescent value orientation in Amuwo-Odofin Local Government Area of Lagos State. Specifically, this study addressed the following objectives:
  I.   Examine the influence of authoritative parenting style on social value orientation of adolescents.
 II.   Examine the influence of authoritarian parenting style on social value orientation of adolescents.
III.   Examine the influence of permissive parenting style on value orientation of adolescent.
 IV.   Examine the relationship between social value orientations of adolescents parenting style.

Research Hypotheses

In this study, the following hypotheses were formulated and tested to guide the study:
  I.   There is no significant influence of authoritative parenting style on value orientation of adolescents.
 II.   There is no significant influence of authoritarian parenting style on value orientation.
III.   There is no significant influence of permissive parenting style on value orientation of adolescents.
 IV.   There is no significant difference in value orientation of adolescents as a result of different parenting styles.

METHODOLOGY

The study was conducted using the descriptive survey design. The population of this study comprised all the students in senior secondary schools in Lagos State, while study area comprised all SS II students from Amuwo-Odofin Local Government Area within ages of (15 to 18) that are not in the terminal class and are not burdened with the pressure of preparing for external examinations. The sample comprised 150 (75 males and 75 females) Senior Secondary School II students from three randomly selected schools. However, fifty (50) students were selected from each of the selected schools using the stratified sampling technique. A stratified random technique is a method of selecting participants in their natural strata. The study stratification to be used for the study will be based on gender and age. The instrument was a researcher-made questionnaire titled *"Influence of Parenting Style on Adolescent Value*

Orientation Questionnaire (IPSAVOQ)". It consisted of two major sections 'A' and 'B'. Section 'A' contained the demographic data such as gender and age, while Section 'B' contained items that measured the variables in the study – authoritative parents, authoritarian parents, permissive parents and value orientation. Each statement in Section B had 4 options task under Likert scale 'Strongly Agree', 'Agree', 'Disagree' and 'Strongly Disagree'. Reliability of the instrument was carried out using Cronbach's Alpha reliability analysis was employed to determine the reliability coefficient of the research instrument. The alpha coefficient obtained was 0.82, suggesting that the items have relatively high internal consistency and adjudged to be reliable. The corrected instrument was administered to the participants by the researcher in their schools during the school period, with the assistance of their teachers. The instrument was administered and retrieved immediately upon completion to ensure 100% rate of return. Thereafter, the administered instrument was collated for data analysis. Descriptive statistics such as the percentage and frequency counts were used in analyzing the bio-data of the participants, while the hypotheses were analyzed with the use of Pearson Product Moment Correlation and One-way Analysis of Variance (ANOVA) at 0.05 level of significance. Pearson Product Moment Correlation was used to test hypotheses 1, 2 and 3 while One-way Analysis of Variance (ANOVA) was used to test hypothesis 4.

RESULTS

The results of data analysis for all the tested hypotheses are presented in Tables 1 to 5.

Test and Interpretation of Hypotheses

Hypothesis One: This hypothesis in the null form states that there is no significant influence of parenting style on value orientation of adolescents raised by authoritative parents.
The result of the analysis is presented in Table 1.

Table 1: Influence of authoritative parenting style on social value orientation of adolescents

Variables	$\bar{X}$	Sd	N	Df	r-cal	r-crit
Authoritative Parents	17.41	3.26				
			150	148	0.68	0.195
Adolescents' value orientation	38.86	3.42				

$P < 0.05$

From Table 1, the value of r-calculated (r-cal= 0.68) is significantly greater than the value of r-critical (r-crit = 0.195) with 148 degrees of freedom at 0.05 level of significance. This led to the rejection of the hypothesis and shows that there is a significant influence of authoritative parenting style on value orientation.

Hypothesis Two: This hypothesis in the null form states that there is no significant influence of parenting style on value orientation of adolescents brought up by authoritarian parents.
In testing this hypothesis, the Pearson Product Moment Correlation Coefficient statistical tool was used. The result of the analysis is presented in Table 2.

Table 2: Influence of Authoritarian Parenting Style on Value Orientation of Adolescents

Variables	**$\bar{X}$**	**Sd**	**N**	**Df**	**r-cal**	**r-crit**
Authoritarian Parents	13.16	2.11				
			150	148	0.71	0.195
Adolescents' value orientation	38.86	3.42				

$P < 0.05$

From Table 2, the value of r-calculated (r-cal=0.71) is significantly greater than the value of r-critical (r-crit=0.195) with 148 degrees of freedom at 0.05 level of significance, thus, the rejection of the hypothesis. It implies that there is a significant influence of authoritarian parenting style on value orientation of adolescents.

Hypothesis Three: This hypothesis in the null form states that there is no significant influence of parenting style on value orientation of adolescents raised under permissive parents.

In testing this hypothesis, the Pearson Product Moment Correlation Coefficient statistical tool was used. The result of the analysis is presented in Table 3.

Table 3: **Influence of permissive parenting style on value orientation of adolescents**

Variables	x̄	Sd	N	Df	r-cal	r-crit
Permissive Parents	16.82	2.98				
			150	148	0.67	0.195
Adolescents' value orientation	38.86	3.42				

P < 0.05

From Table 3, the value of r-calculated (r-cal=0.67) is significantly greater than the value of r-critical (r-crit=0.195) with 148 degrees of freedom at 0.05 level of significance. Consequently, the hypothesis was rejected. This shows that there is a significant influence of parenting style on value orientation of adolescents raised under permissive parents.

Hypothesis Four: In the null form, states that there is no significant difference in value orientation of adolescents as a result of the parenting styles. The hypothesis was tested with the use of the One-way Analysis of Variance (ANOVA) statistical tool. The result of the analysis is presented in Table 4.

Table 4: One-way Analysis of Variance (ANOVA) on significant difference in social value orientation of adolescents as a result of the parenting styles

Groups		n	x̄	Sd		
Permissive		48	16.82	2.98		
Authoritarian		50	13.16	2.11		
Authoritative		52	17.41	3.26		
Total		150	54.93	4.584		
Source of Variance	SS	DF			MS	F-ratio
Between Groups	15.904	2			7.953	3.375
Within Groups	2484.418	147			21.234	
Total	2500.325	149				

P < 0.05; df = 2 and 147; critical F = 3.09

From Table 4, F calculated = 3.375 while F tabulated = 3.09. The result shown indicates that the ANOVA comparison yielded a calculated F-value of 3.375. This value is greater than the critical F-value of 3.09 with 2/147 degrees of freedom at 0.05 level of significance. This means that the hypothesis was consequently rejected and automatically concluded that there is a significant difference in value orientation of adolescents as a result of the parenting styles. In order to show the significance, pair-wise comparison was done.

Table 5: Pair-wise Comparison of Group Means

Groups	n	x̄	Sd	df	t-cal	t-crit
Permissive	48	16.82	2.98	46	3.19	2.02
Authoritarian	50	13.16	2.11	48	2.47	2.02
Authoritative	52	17.41	3.26	50	4.12	2.01

P < 0.05

Further analysis of data was done using t-test to enable pair-wise comparison of group means to determine which group differ from the other on the variable. The comparison shows that a combination of authoritative and permissive parenting styles displays higher scores in the social value orientation of the adolescents. The result of the analysis shows that adolescents from authoritative parents significantly differ on their value orientation from those with permissive and authoritarian (t = 4.12; df = 50; critical t = 2.01; P > 0.05). On the other hand, adolescents from permissive homes have higher social value orientation score than those from authoritarian homes (t = 3.19; dt = 46; critical t = 2.02; P > 0.05). However, adolescents with authoritarian parents differ in social value orientation from authoritative and permissive parenting styles (t = 2.47; df =: critical t = 2.02; P > 0.05).

DISCUSSION

The results of this study were discussed based on the results of the hypotheses tested in the study. The findings in hypothesis one reveals that there is a significant influence of parenting social style on value orientation of adolescents raised by authoritative parents. This is in line with Kolo's (2010) findings who found that authoritative parents have adolescents who achieve better and demonstrate more positive social adjustment than adolescents whose parents adopt authoritarian or permissive parenting style. This finding is also in collaboration with Timpano (2010) who noted that authoritative parenting is marked by parental warmth, use of rules and reasoning or induction to promote obedience and keep discipline. Such parents use verbal and non-physical punitive measures to correct a child than physical punishment; they are equally consistent in their words and actions over time. Authoritative parenting allows extensive verbal give- and- take with their adolescent children. Thus, adolescents from such homes are self reliant, socially responsible and have socially competent behaviour. Accordingly, Akpama (2013) opined that authoritative parents see themselves as leaders who set the rules together with their adolescents. They recognize the special rights of their adolescents, but at the same time take firm control where the adolescents seem to have divergent opinion to behaviours and actions that has to do with value orientation of adolescents. Accordingly, Cardinali & D'Allura (2009) mentioned that adolescents treated authoritatively become more socially adjusted and independent compared to their peers. Maccoby & Martin (2013) also found that young people who experienced authoritative parenting style have higher social development and self-esteem than other parenting styles. In the same vein, Yusuf, Agbonna & Yusuf (2009) asserted that authoritative parenting has been consistently associated with positive cognitive, emotional and social outcomes.

The study findings on hypothesis two reveals that there is a significant influence of parenting style on social value orientation of adolescents brought up by authoritarian parents. This finding supports Bacus (2014) who reported that authoritarian parenting style puts children at a greater risk of anxiety, low self-esteem and depression. Adolescents from authoritarian families were found to be more dependent and passive (Suess, Grossman & Sroufe, 2012). These adolescents were found to be less self-assured and had low self-esteem as well as having weak communication skills. Authoritarian parenting can also be associated with behavioral and psychological control. Behavioural control includes structuring the child and tracking behaviour in different environments (Barber & Olsen, 2015). Psychological control is an

attempt by the parent to control their children through manipulation of thoughts and feelings. Behavioural and psychological controls have been found to predict very different outcomes in adolescents. Low levels of behavioural control are associated with problems such as antisocial behaviour and drug use. High levels of psychological control are linked to anxiety, depression, and withdrawn behaviour. Biller (2013) reported that an authoritative parent is more likely to express behavioural control while an authoritarian parent is likely to express psychological control. It is important to consider behavioral and psychological control because it may affect an adolescent's development of autonomy and self-regulation. Findings in hypothesis three reveal that there is a significant influence of parenting style on social value orientation of adolescents raised under permissive parents. This is in line with Maccoby & Martins (2013) who noted that permissive parenting is associated with social incompetence and lack of self-control. Adolescents from permissive or indulgent parents are considered to be less responsible, easily influenced by friends and peers, have little to no interest in school, and are more likely to get involved in delinquency and drug use (Maccoby & Martin, 2013). These adolescents lack behavioral and verbal control, are more aggressive, and have difficulty following school rules. These abilities, or lack of abilities, result in the child not succeeding in the educational sphere. Blondal & Adalbjarnardottir (2009) found that the perceived parenting style in the eyes of the adolescent has a direct effect on whether the student completes secondary education or not (Blondal & Adalbjarnardottir, 2009). The adolescent believes the parent has certain expectations and so the adolescent attempts to rise to those expectations. Blondal & Adalbjarnardottir, (2009), elaborate by stating that having a parent demonstrate an interest in the life of an adolescent, when the parent has expectation like that of the authoritative parent and not a disinterest like the neglectful parent, an adolescent is less likely to become a school dropout. This involvement is sometimes as simple as the adolescent knowing there is a support system if needed from the parent (Blondal & Adalbjarnardottir, 2009). By believing and knowing their parents have expectation and are supportive, an adolescent is more likely to be successful in school and continue their education.

The findings in hypothesis four also revealed that there is a significant difference in social value orientation of adolescents as a result of the parenting styles. This supports Vijila, Jose & Ponnusamy (2013) who asserted that parenting style plays a crucial and formative role in the development of their children especially their social, emotional such as affect regulation; cognitive such as found of information, skills for processing or acquisition, perspective taking and behavioural such as conversation skills as well as pro social behaviour skills needed for successful social adaptation. Also, Joshi, Sharma & Mehra (2009) opined that parenting typologies such as authoritative, authoritarian, permissive and neglectful were found to be a pivotal element in defining the behaviour and attitude of parents toward their children. Goddard & Denis (2013) found that children of indulgent parents had the highest level of self-esteem while those of authoritarian parents had the lowest levels of self-esteem. Chao (2011) found that both the children of indulgent and authoritative parents had the highest levels of self-esteem. These variations in results make it unclear as to which parenting style could be labelled as most successful in self-esteem development. Okorodudu (2010) reported that irrespective of gender, location and age, parenting styles effectively predict adolescents' delinquency and value orientation.

CONCLUSION

Based on the findings of this study, it was concluded that there is a significant influence of parenting styles namely authoritative, authoritarian and permissive) on adolescents' value orientation. Over time, scholars as well as the society have asserted that parents have a critical role to play in determining the level of their children's value orientation. From this study, it was concluded that it is important for parents to adopt the authoritative parenting style among their adolescent children. This is because as much as authoritative parenting establishes rules and

guidelines, and demonstrates power, it is more democratic than authoritarian who is important to build the children's self esteem and self discipline which trickles down to good value orientation. From the study, it was also concluded that the permissive parenting style could lead to a positive value orientation.

COUNSELLING IMPLICATIONS

I.   It has been found that the parents play an important role in adolescents' pro-social values orientation. Thus, involvement of parents in adolescent's value orientation is important.

II. This study suggests that counsellors should work directly with parents, collaborating with them and helping them to improve their effectiveness in guiding their children. Counsellors should encourage parents not only to communicate effectively with their children, but to show faith in their children's abilities to be successful, providing them with encouragement and information.

III. Counsellors can help parents by providing them with information and support. Counsellors should meet with parents individually or collectively to disseminate information on how to facilitate their adolescents' value orientation.

IV. Counsellors could use fora like PTA meetings, Speech and Prize Giving Days, Open Days and Anniversaries to educate parents on the influence of parenting styles on children's development. Through this, counsellors would help parents nurture the virtuous child for the millennium. The child who would possess not only the knowledge and competencies needed for societal progress and development but also the cherished values and attitudes which are pre-requisite for social cohesion and integration, and national development.

RECOMMENDATIONS

Based on the research findings, the following recommendations are proffered:

I.   It is necessary for parents to be well aware of the negative and positive impacts of the various parenting styles on adolescents' value orientation. Parents ought to be educated on the importance of adopting the parenting style that would aid in promoting their children's development.

II. The parents should not give more preference to authoritarian or permissive parenting style rather give more preference to authoritative parenting style and have a balance in-between other parenting styles.

III. Parents should design the environment that will demonstrate warmth, acceptance, emotional support and involvement in the upbringing of their children.

IV. Parents should start showing commitments to their children well being right from the unset of their developmental stage (birth). The Bible confirms this when it is said that children should be brought up in ways that when they grow, they will not depart from it. This will accord the children societal acceptance.

V.   Parents should present themselves as role models to their children. Children can learn how to cope with the demands of the society and home from their parents. It will also influence the children in their self-perception and self esteem.

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INTERCULTURAL EDUCATION AS A 21ST CENTURY GLOBAL ISSUE: THE CASE OF AFRICA AND AFRICANS IN GERMAN SCHOOLBOOKS

MARINO SAMOU KAMDEM[1]

ABSTRACT

Using the content analysis – an approach based on examining written texts and publications of some authors relating to the mentioned field, we make use from results of these studies to suggest ways of reducing the phenomenon of ethnic exclusion, biases, stereotypes and racism in our more and more globalised and multicultural societies. After examining the representation of Africa and Africans in some German schoolbooks, results show that Africa and Africans continue to be depicted with (colonial) prejudices in degrading ways based on a dominant euro-centered view as pattern (Poenicke, 2001; 2003; 2008; Marmer and Sow 2013). This colonial mindset needs to be decolonised and the type of information exposed to people reoriented and made more peace- seeking.

The approach of Intercultural Education aims to prepare learners and instructors for cohabiting in a multicultural society, where differences are accepted. Authorities, publishing houses, teacher and learner must be directly involved in this global and vital challenge.

Keywords: Intercultural education, African image in German schoolbooks, racism.

INTRODUCTION

The power of education is undisputable and overwhelming. It is known that schools are practical instruments used to carry ideas and socials values into our societies. It is also known that it is strategically comfortable to start working on children and youngster, precisely when deciders plan to implement (new) societal orders and values and/or rectify detected mistakes. To achieve these goals, education (like) schools appear as indispensable instruments which offer the possibility for a wider group of people to be reached and influenced consequently in the long term. On the other hand, these instruments can be in some situations considered as a sort of double- edged- sword. They can stand in the forefront if used in the wrong way, also inappropriate, and therefore play a key role in controversial issues for example in the production, reproduction and consolidation of social injustice and inequality.

About controversial issues, the representation of other ethnic groups in western countries has been studied at many levels of the society like media, literature and schoolbooks. This paper will focus its attention on the last mentioned field in order to emphasise the way Africa and Africans are represented in German schoolbooks and the effects of this representation. After looking into this subject, some reasons will be highlighted how and why the implementation of intercultural Education must be seen as a global imperative, particularly in multicultural societies.

The main goal of using intercultural approaches in Education is to help children to be aware of ethnic differences among human beings, which must be accepted and respected by all groups one another.

THE FOREIGN POPULATION IN GERMANY

This is a famous declaration of the German Authorities about immigration: "Germany is not a country of immigration". This declaration dates back from 1983 and results from the coalition agreement of two German political parties, the Union and the Liberal Democratic Party at that time. In our recent past this declaration has been used by some political authorities, particularly from the Christian Democratic Union (Schäuble in 2006 and later in 2010 always by the CDU).

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This assertion resulted in controversies and was little by little called into question by some other politicians and the population. They kept in mind the agreements of 1955, which recruited the so called "guest workers" from many countries (Turkey, Italy, Spain, Morocco, Portugal, Greece, Yugoslavia and Tunisia) to move in West Germany and work for the German economy, where most of them stayed and built their family. With these agreements it was quasi impossible to stop the migration flow after the ban of recruitment (1973) and the majority of these "guest workers" stayed in Germany with their family and children, which were meanwhile born in their host country.

In 1973 the number of the foreigners reached four million in Germany. Migrants´ children increased considerably with time, particularly by the most represented guest Worker´s group, the Turks. These migrants grew up within their cultural differences, but mostly attended the same schools like German children. With the new immigration law of 2005 Germany acknowledged for the first time to be an immigration country and in December 2017 German authorities announced the presence of 19.3 million people with a migration background, 10.6 million people with foreigner passports for the total number of 82, 8 million inhabitants in the Federal Republic of Germany. This means every fifth person in Germany has a migration background. At the end of the year 2017 there were 511.000 persons from Africa living in the Federal Republic of Germany (Zeit, 2018).

THE AFRICAN IMAGE IN GERMAN SCHOOLBOOKS

One of the ethnic groups and countries strongly affected when there are portrayed in German schoolbooks are non-white ethnic groups, particularly African people and African countries. After examining the representation of Africa and Africans in some German schoolbooks, newer studies show that Africa and Africans continue to be depicted with (colonial) prejudices in degrading ways based on a dominant, euro-centered view as pattern. This approach to the African continent remains paternalistic with an uncritical reproduction of colonial racist terminology (Poenicke, 2001; 2003; 2008; Marmer and Sow, 2013). Some schoolbooks emphasise colonial expansion as a legitimate enterprise, which was beneficial for both colonisers and colonised. Opposites like civilised and uncivilised, traditional and modern, developed and underdeveloped/developing countries continue to be used and taught to the learners without any continuous process of critical reflection.

According to Poenicke (2003) organisational forms of pre-colonial African societies are either not taught, or are only briefly mentioned in the context of colonisation. Further, colonialism has not been revisited enough and instead of opening possibilities for young learners to reflect and critically build their minds, its "positive" effects are shown in books and classrooms. This colonial mindset needs to be decolonised and the type of information exposed to people reoriented and made more peace- seeking. Africa is generally presented as a lost continent without history, where hunger, genocide and violence are top on the agenda (Arndt, 2001). The problem is that this view using extreme images not only reduces the entire sub-Saharan Africa and black African people to partial information, but also fades out the positive side of this hospitable continent while ignoring the role that western imperialism plays in this critical situation. As the second largest world continent, its diversity is abstracted away from the large diffused image.

Marmer and Sow published in 2013 a paper where they analysed four history textbooks series; a total of fourteen Books for the grades 6 to 10 published between 2000 and 2011 by the houses Cornelsen, Klett, Schroedel and Westermann for the student´s ages between 11 and 16 Years old. They reached to the conclusion that "Africa is extremely marginalised in German history teaching. The approach of the books is Eurocentric, i.e. Africa, but also Asia and the Americas with the exception of the US are strongly underrepresented" (Marmer and Sow, 2013, p. 71). Furthermore, racist and pejorative Words such as the N-word, Buschmann, Hottentotten as well as expressions borrowed from the flora and fauna like Mischling (crossbreed), Mulatte

(mulatto) became internalised, so that some people are often no longer aware of their racist intentions. Another remark concerns the publishing house Klett, which insistently uses the racist colonial term "Negersklaven". The authors find it unacceptable, then even the term "slave" needs to be revised: "Slave reduces an individual to a commodity and permanently attributes to him dependency and compliance; therefore, the term enslaved is suggested which expresses that slavery is a forced condition" (Marmer and Sow, 2013, p. 59).

Two year earlier Marmer and Sow published with two other authors (Marmer and Hitomi) the results of a pilot case study related to the impact of this way of portraying the African continent in German schoolbooks using empirical case study (Marmer et al., 2011). They came to the conclusion that many white students associate and stigmatised their African classmates with the information received from their curricular, also with the "dark Africa". This study aimed to "understand the relationship between the portrayal of Africa in German teaching materials and racism in German schools against students of African descent" and revealed that "the students have absolute lack of information of any kind or provide evidently wrong information" concerning the African continent. For example, they see the whole African continent as a "big country" and not as a heterogeneous continent with 54 States (Marmer et al., 2011, p. 6).

WHAT IS INTERCULTURAL EDUCATION AND ITS IMPORTANCE IN THE 21ST CENTURY?

Intercultural education can be an answer to the current global imperative of living together in a globalised world, where people from different ethnic groups intend cohabiting peacefully. We are living the era of Globalisation and this generation must be for this reason prepared to navigate in an open world in order to react and interact with tolerance and respect during the day-to-day interpersonal relationships with people from different cultural and ethnic backgrounds. This approach aims to prepare learners and instructors for cohabiting in a multicultural society, where differences are accepted. Using this approach people can learn to understand themselves and others, which they shall handle respectfully.

According to UNESCO (2006) the concept of intercultural education can be defined as "the existence and equitable interaction of diverse cultures and the possibility of generating shared cultural expressions through dialogue and mutual respect". In a world experiencing rapid change, and where cultural, political, economic and social upheaval challenge traditional ways of life, education has a major role to play in promoting social cohesion and peaceful coexistence. Through programs that encourage dialogue between students of different cultures, beliefs and religions, education can make an important and meaningful contribution to sustainable and tolerant societies. That is why UNESCO sees the intercultural Education as a response to the challenge to provide quality education for all.

UNESCO (2006) distinguished intercultural from multicultural education. The intercultural concept is dynamic, interactive and refers to evolving relations between cultural groups. It presupposes multiculturalism and results from intercultural exchange and dialogue on the local, regional, national or international level. Multiculturalism doesn't require a dynamic process and refers to the cultural diversity in a particular society not necessary with an interaction within the different ethnic groups. This diversity in multiculturalism goes above the consideration of ethnic and national cultures and includes elements of language, religion and economy related to the respective group.

UNESCO (2006) emphasises the development of inclusive curricula that contain learning about the languages, histories and cultures of non-dominant groups in society. Education should focus on its four pillars, which are: Learning to know, learning to do, learning to live together, and learning to be. The real implementation of international education should aim for achieving at least the third pillar of learning to live together as precondition for peace and democracy.

CONCLUSION

Speaking about intercultural education is speaking about the future of our nations. In regard to the bygone like current conflicts related to the non-acceptance of the difference and the so called hegemony of some dominant groups and peoples, integrative and peaceful approaches like intercultural education must be implemented in our societies that become more and more multicultural. This shall be an imperative issue for all involved stakeholders dealing with education. It must not only concern the learning environment, but also the other dimensions of educational processes, such as school life and decision making, teacher education and training, curricula, languages of instruction, teaching methods and student interactions, and learning materials. The differences in presenting the diverse cultures are important to be highlighted, but with respect and free from prejudice.

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UNDERSTANDING FLOOR AREA RATIO: CASE OF MUMBAI

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ABSTRACT

Mumbai city has a natural land constraint. The stress is exacerbated by restraints imposed by the Development Control Regulations (DCR). Planning tools like Floor Area Ratio (FAR) and Transferable Development Rights (TDR) pertaining to living space were adapted in Mumbai in an unparalleled manner that led to an uneven wave of structures being built in the city. This refitting of an international planning tool into a local fiscal tool demands scrutiny, besides the examination of its repercussions on the overall housing market scenario of Mumbai. The focus of this paper is to study the adoption of FAR and the related tools in Mumbai which could be held partially responsible for the dearth of formal affordable housing. We also try to critique the use of these instruments more for fiscal than planning purpose in Mumbai.

Keywords: Affordable housing, FAR/FSI, TDR, Development plan, Mumbai.

INTRODUCTION

The encircling regulations and housing schemes play an important role in determining the supply of houses. This is being done by imposing a confinement within which the housing market functions. Mumbai is known for soaring real estate prices, high density living and the consequent compact living conditions. It is being contended that the planning regulations have a considerable contribution towards the current dearth of Affordable Housing in the city. This paper discusses the origin of one such regulation, FAR, that is used as a Planning Instrument in the Western World, its adoption by Mumbai Administrators and the course of its changeover from a Planning Instrument to the Local Government's virtual folding money. Upon describing the distortion of the fundamental meaning of FAR and TDR in Mumbai, this paper unfolds to discuss the way tools and policy instruments are being used in the name of the poor. This paper is primarily based on the experience of two Development Plans (DP) that have been implemented in Mumbai, the guiding DCR's, two drafts of the latest plan and related regulations and reports. The structure of the paper is as follows. Part I being the introduction, Part II explains the concept of FAR and TDR with their global and local adoption. Part III, IV and V discusses the underlying loopholes and the distortions they have caused in the housing market of Mumbai and their use as fiscal instruments by the local authority. Part VI gives an elaboration on the FAR debate, arguing whether it is advisable to increase FAR in Mumbai or not. Part VII concludes the paper.

SEASCAPE OF FAR AND TDR

The right to any kind of development on a plot of land can be termed as a development right. Such rights, when assigned to a plot as FAR, may or may not be used on the respective plot due to planning restrictions; and alternatively, be severed from the plot to be used at some other location as TDRs. FAR on a plot is gauged by dividing the constructed floor area by the area of the plot on which it squats. The maximum limit on FAR diffusely determines the maximum height of the building too (Bertaud and Brueckner, 2005). FAR cap could be either prescribed or be limitless as per the *Ad Coelum* doctrine (Block, 2008). The purpose of confining FAR across cities may vary from availability of infrastructure, preservation of historical monuments, density control, proximity to an airport etc. Similar to the maximum permissible FAR regulation, few cities like City of Buffalo, Oregon City and Colorado Springs have laid down

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regulations about minimum FAR in order to forestall underdevelopment (Joshi and Kono, 2009).

The part of allotted FAR that remains unused is transferred to another location as TDR and has an explicit mention of the sending and receiving areas on the certificate. Generally, the environmental sensitivity is higher in the sending area vis-a-vis the receiving area (Johnston and Madison, 1997). Presumably, the TDRs do not add any additional burden since these rights are not a fresh issue; instead they are a transfer of existing "authorised but unused rights" (Richards, 1986, p. 437). They were first adopted in New York City to transfer development rights across adjacent plots (Yaro et al., 1998). This concept was later used in different parts of USA with divergent objectives i.e. In **Montgomery County** to preserve agricultural lands (Johnston and Madison, 1997,); in **Chicago** to preserve landmark buildings; in **Virginia** to replace zoning (Woodbury, 2007); in **Collier County** to conserve environment sensitive lands and in **Chesterfield Township** to adapt to growth and protect open spaces (Walls and McConnell, 2007).

An increase in urban land is required as any city prospers. Inability to do so results in high cost of land and houses. This shortage of land is rather synonymous to shortage of Floor Space (Bertaud, 2010). Being a linear city and locked by sea on three sides, Mumbai could expand only towards North. The Island City was the initial CBD and the area to the north, called Suburbs started developing on the pretext of rising property prices and the consequent dearth of affordable space on the Island City. Ostensibly, the study of FAR may look trivial, but the number of lives it affects makes the discussion relevant. On account of low FAR for a prolonged period, presently two third of the city's population is staying in slums with a per capita floor space of $2.2m^2$ for slum dwellers (Karn, Shikura and Harada, 2003) and $4.5 m^2$ (Bertaud, 2011) for the city dwellers on an average. Unaffordable rentals and property prices in the core pushes people to distant suburbs increasing the travel time for work to 1-2 hours to cover a distance of 10-15 miles during peak hours.

Post Independence, the development on a given plot in Mumbai was mostly ground plus three-four floors with standard setbacks, requirements of natural light and ventilation, depending upon the height of the building. This system was modified to restrict the development on a given plot by a FAR cap through the Development Plan 1964 that fixed FAR for Island City and Suburbs ranging from 1 to 4.5 for different areas. Thereafter, the designated FAR has been mostly uni-directionally revised downwards with exemptions on functional grounds. These exemptions are mostly under the blanket of "Public Purpose". The use of FAR for public purpose has increased with time, (Municipal Corporation of Greater Bombay, 1964) adding more heads under which extra FAR is being dispensed for functional reasons.

LOOPHOLES IN MUMBAI'S FAR POLICY

Against the Omni form FAR framework brought in by DP 1964 (Municipal Corporation of Greater Bombay, 1964), was confined in the DP 1991((Municipal Corporation of Greater Mumbai, 1991) to the Zonal FAR for Island City at 1.33 and Suburban Mumbai at 1. The underlying argument was to decongest the Island City from its overcrowded form. Globally, most large cities have a FAR range of 5 to 15 in the Central Business District and 0.5 in the suburbs (Bertaud, 2011). The graph of FAR plotted against the distance from CBD is downward sloping in most of the cities, satisfying the 'One Price Principle' (Pethe, 2010, p.6). The flat FAR rule in Mumbai came with its escapes clauses where few exemptions covered either large areas or huge population sets that affected a considerable part of the city plan. For eg, the redevelopment of Cessed Buildings[2] covered close to 20,000 buildings and rehabilitation of

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[2] Cessed Buildings comprise the old buildings in southern Mumbai whose rents were frozen at 1940 levels in consonance with the Rent Control Act that lost the interest of the property owners due to low returns. Due to lack of incentives, the buildings weren't maintained by the owners necessitating the emergence of Buildings

slums covered two third of the city's population. Against the *sine qua non*, keeping the basic FAR low could be inferred as an escape plan of the Local Government from the provision of additional infrastructure.

Table 1. FAR prescribed under DP 1991 and two draft versions of DP 2014-34 for residential use in Island City and suburbs.

Type of FAR	Sanctioned Draft DP 1991		Earlier Draft DP 2014-34		Revised Draft DP 2014-34	
	I.C	Sub	I.C	Sub	I.C	Sub
Basic Zonal FAR	1.33	1	0.15 – 2.50		1.33	1
TDR	0.33	0.67 (Road FAR + TDR) (not to exceed 0.8)	0.5 (TDRr = TDRo x (RRLo/RRLr)		0.33 TDRr = TDRo x (RRLo/ RRLr)	0.5
Premium FAR	0.33 @ 60% of ready reckoner floor space rate		0.50 – 2.50 (Premium A FAR @ 70% of land rate) 0.50 – 2.50 (Premium B FAR @ 100% of the land rate)		0.34 (@ 60% of land rate)	0.5
Maximum Permissible FAR	2	2	0.15 – 8.00		2	2
Fungible FAR	35% of Admissible FAR @ 60% of ready reckoner Rate		-		35% of Admissible FAR @ 60% of ready reckoner Rate	
Incentive FAR	Land Rate per sq.mt/ rate of construction. Higher the ratio, lower the Incentive FAR		I/R_b= 0.92x (Rl + RC) x 100		Land Rate per sq.mt/ rate of construction. Higher the ratio, lower the Incentive FAR	

Source: Author's creation based o DCR 1991, Earlier Draft Development Plan 2014-34 and Revised Draft Development Plan 2014-34.

*Utilization of TDR under EDDP and RDDP is as per the following formula: $TDR_r = TDR_o$ x (RRL_o/RRL_r), where TDR_r means TDR at receiving plot, TDR_o means TDR at originating plot, RRL_o and RRL_r means Ready Reckoner Rate of Land at originating plot and receiving plot respectively.
**In I/R_b= 0.92x (Rl + RC) x 100, I/R_b =Ratio of Incentive FAR to Rehabilitation FAR in percent, Rl = Ratio of Ready Reckoner Land price to Ready Reckoner Sales Price, Rc = Ratio of Ready Reckoner Construction Cost to Ready Reckoner Sales Price.

Table 1 lists the FAR rules pertaining to the Sanctioned DP 1991-2011, earlier draft DP 2014-34 ((Municipal Corporation of Greater Mumbai, 2016) and the revised draft DP 2014-34 ((Municipal Corporation of Greater Mumbai, 2017). In addition to the low FAR, the labyrinthine nature of FAR scheme adapted in Mumbai is elucidated below.

Repair and Reconstruction Board. The board levies a cess on such buildings and undertakes their repair and maintenance works up to a certain expenditure limit. Majority of these buildings were built before the FAR limits were adapted and hence have a higher FAR. Being old, they are in dire need of redevelopment.

The development rights assumed attached with a plot is termed as the **Basic Zonal FAR**. If required, more FAR could be added by using tools like TDR and Premium FAR. The Premium FAR may be bought at the rate of 60% of the ready reckoner rate in the respective area such that,

Permissible FAR = Basic Zonal FAR + Premium FAR + Admissible TDR = 2 (for Island City and Suburbs)

Besides, there exists a big room of exemptions to provide for the civic accountability of the Local Government. In other words, instead of a restrictive dictionary meaning, Permissible FAR in Mumbai has more of a legal meaning and is variable. For exemptions tied to rehabilitation and redevelopment, Incentive FAR is offered as a cross subsidization strategy to the developers for rehabilitating the existing occupants free of cost. Admissible FAR here is the maximum FAR generated on a given parcel of land, whereas Permissible FAR is the part of it that can be exploited on the said plot where the former is mostly higher than the latter. The positive difference between the Admissible FAR and the Permissible FAR may be awarded as TDR.

Admissible FAR = Rehabilitation FAR + Incentive FAR or Permissible FAR + TDR

Alongside, the Fungible FAR is calculated as 35% over and above the Admissible FAR at the rate of 60% of the ready reckoner rate, to be exercised over and above the permissible FAR.

Maximum generated FAR = Admissible FAR/ Permissible FAR (whichever is higher) + Fungible FAR (35% of Admissible FAR)

Further to the definitional discrepancy, stand the exemptions on functional grounds. Other than the Basic Zonal FAR, the DCR, 1991 prescribed over 15 different Permissible FAR's depending on the functionality of the building. For the purpose of this paper, we restrict ourselves to the exemptions related to the redevelopment, resettlement and rehabilitation in Mumbai cited in Table 2 below.

Table 2. FAR exemptions apropos redevelopment, rehabilitation and resettlement

Category		Permissible FAR
Cessed Buildings	Old buildings belonging to police Department	2.5 or Rehab + Incentive FAR
	Redevelopment of Cessed Building in Island City	3 or rehabilitation of existing occupants + Incentive FAR 50% (for individual building) / 60% (for composite development of 2-5 plots) / 70% (for more than 5 plots), whichever is more
Urban Renewal Scheme		4 or Rehab + Incentive FAR, whichever is more
MHADA Housing Construction		3 on gross plot area
Redevelopment of Slums		4
Development of land earmarked for the MHADA/Mill Workers Housing under Regulation 58		Additional FAR to the extent of 200% over and above Permissible FAR (for Mill workers Housing)

Dharavi Notified Area	4
Housing the Dishoused	4

Source: Author's creation based on DCR 1991.

Of all the cases mentioned above, the case of Cessed buildings is worth highlighting. Unlike other cases, the in-situ FAR allowed for Redevelopment of Cessed buildings is unlimited. For eg. When a Cessed building with an existing FAR of 4 is redeveloped, the post redevelopment Admissible FAR advances up to 9.7 that is allowed to be exercised on the same plot. Principally, functional allocation of FAR has to be frowned upon. Even though the effect of individual projects might be trivial, the overall impact under a scheme and multiple such schemes distorts the real estate market. It should be noted that the Factual FAR in Mumbai is most often higher than the stated maximum Permissible FAR. More than assisting planning FAR is being used to direct higher FAR to the Developers in the domain of social benefits.

IMPACT OF LOW FAR ON THE HOUSING MARKET

Alongside formal housing, Mumbai housing market comprises a sizeable informal component. As reported by Census 2001, slum population equivalent to 54.1% of the city's population (41.3% as per Census, 2011) squats over mere 6% of Mumbai's land (Municipal Corporation of Greater Mumbai, 2010). The issue at hand is to understand the reasons behind the uncatered demand for Affordable Houses. Under the current system of restraining regulations and multiple permissions, developers might want to make higher margins by dealing in the upper housing market segment where along with high margins, the time and money involved is better redeemed. According to Building Control Regulations, if builders in Mumbai build smaller houses, they won't be able to exercise full FAR. Alternatively, in view of Rajesh Krishnan, 'there is a huge demand for small format house and they sell quicker' (Gopalan and Venkataraman, 2015, p. 139).

Along with the announcement of free of cost formal houses to all slum dwellers residing in Mumbai before 1.1.1995 (later extended to 1.1.2000),[3] Slum Rehabilitation Authority (SRA) was constituted as a Planning Authority alongside the Municipal Corporation of Greater Mumbai (MCGM). At the cost of inviting institutional conflict, SRA was empowered to declare any area as a slum and make requisite modifications to the DP prepared and implemented by the MCGM. From the slum dwellers viewpoint, this policy is either opposed due to a uniform floor space allotted to all, irrespective of the existing space occupied by them or it is seen as a bonanza deal where they take possession of the tenement for free and illegally sell it at lower than market price which is still a prize money for them. Furthermore, the slum dwellers at times have to pay a bounty to SRA officials in order to avoid delays in allotment. Either ways, distortion in the housing market is a given.

Mumbai is one of the most densely populated cities of the world. All rehabilitation schemes are based on the acknowledgement of further increase in density in the already dense areas. The likelihood that free sale component constructed in situ will be bought by the slum dwellers is highly unlikely due to a deliberate effort by the developers to withhold the prices from falling. The free sale component may lead to vacant houses also. Be it sold and vacant or unsold and vacant; either ways this is adding to the existing stock of vacant houses in the City. The position of unsold and vacant tenements might put the completion of such buildings in jeopardy since the flow of funds will be interrupted. There are nearly 1,19,526 unsold houses inventory in Mumbai (Knight Frank, 2014). It signals negatively about the economic activity.

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[3] Shirish Patel, an Indian Urban Planner and one of the three masterminds behind the idea of creating Navi Mumbai, calls this as '40 lakh Free Lunches' (Patel, 1995)

The point to be made here is that one bad policy leads to another and hence the undesired outcomes. In one of his speech, Pandit Nehru remarked: 'It is bad enough to inherit slums but to allow them to grow is the society's fault; the Government's fault'(Municipal Corporation of Greater Mumbai, 2010, p. 77).

FAR AND TDR: PLANNING OR FISCAL TOOLS?

Factually, FAR has the density controlling role[4] (Patel, 2013) while TDR was originally introduced as a planning instrument with a forethought towards zoning and heritage preservation. The downward revision of FAR plan after plan managed a sustained scarcity of affordable houses. This established FAR as a lucrative fiscal instrument to generate extra revenue and to fund unbudgeted expenditures for MCGM.

Table 3. Revenue generation through Development Rights.

Source	Amount	Extent
Redevelopment of Cessed Buildings	5000/sq.m.	Additional Development cess for the built up area over and above the normally permissible FAR, or the rehabilitation and free sale component
Urban Renewal Scheme	@100% development charge subject to a minimum of Rs.5000/sq.mt	For the built up area over and above the zonal permissible FAR, for the rehabilitation and the free sale component
IT and ITES use	-	Up to 100% increase in FAR is permitted subject to certain conditions
Construction of Public Parking Lot	Premium charged @ 40% of the value of additional built up space corresponding to Incentive FAR less costs	-
Compensatory Fungible FAR[5]	60%, 80% and 100% of stamp duty ready reckoner rates for residential, Industrial and commercial use	35% for residential development and 20% for Industrial/ Commercial development
Premium FAR	@60% of the ready reckoner rate	Limited to 0.33

Source: Author's creation based on DCR 1991.

The underlying notion for adopting TDR was to guide the development in Mumbai that was instead adapted to keep up the interest of the State and MCGM. The ambiguity regarding the receiving area of the TDR aided its exploitation. Wherever it was not possible to allot or sell additional development rights as FAR, TDR was issued without leaving a mark on the budgets of MCGM for funding infrastructure and other social liabilities. Besides the cashless

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[4]Urban Planner V.K.Phatak argues that density is an outcome and not a controlled variable. It depends not only FAR, but other factors like regulations, policies, culture, incomes also play a crucial role.

[5] It was observed that the list of exemptions from FAR had developed too long and was rampantly misused. This list was pruned. To compensate the developers, the concept of CF FAR was introduced where developers could buy up to 35% of the Admissible FAR to be exercised on the same plot over and above the Permissible FAR @ 60% of the ready reckoner rate for Residential use.

transactions, various heads under which MCGM is generating revenue through Development Rights are listed in Table 3 above.

Other than Fungible FAR[6], the budget estimates of MCGM have no clear mention of the revenue generated from FAR related tools or of any kind of ring fencing for the revenue generated from the above means. Use of costless expenditure financing and revenue generating techniques delude the whole arrangement. This raises a question on the sanctity of the local authority. Any currency that is cost free should not be used. Since there is no hint of the same in the books, it's use is not attached to any accountability.

Nonetheless, nothing comes for free. In case of Mumbai, this policy abuse is ongoing in a coordinate free manner and the entire city is bearing its brunt. In my opinion, FAR should be charged completely. The proceeds must be ring-fenced to be used exclusively for infrastructure verticals in the revenue generating areas. It needs to be noted that the stamp duty registration charges are based on the ready reckoner rates which are a fair reflection of the market price for real estate. Higher the market price of floor space, higher will be the corresponding ready reckoner rates and hence higher revenue from Stamp Duty Registration Charges. MCGM seems to have a direct incentive in maintaining the scarcity of floor space in Mumbai to keep the real estate prices from dropping.

DEBATE ON INCREASE OF FAR LIMIT IN MUMBAI

There has been a ceaseless buzz with respect to the change in FAR regime in Mumbai. Whether to increase the FAR in Mumbai or not? Following other established cities, will an increase in FAR in Mumbai increase the per capita space and induce a downward property price spiral or will it lead to higher densities with overcrowded amenities, infrastructure and even houses? Does Mumbai City have a choice other than increasing FAR? Along with these, many more doubts develop when FAR of Mumbai comes under scrutiny. Where few planners consider an increase in FAR as the last and the only expedient, others believe that the time has not yet come, and the City is not ready for it.

Following his first world experience, Alain Bertaud (2004) endorses higher FAR in Mumbai like any other large city of the world. Where in response to increasing income levels, higher FAR is linked to increased per capita floor space with reduced or constant density (Bertaud, 2004). Shirish Patel, alternatively argues that any increase in FAR in Mumbai will lead to increased congestion, infrastructure crowding and changed densities (Patel, Sheth and Panchal, 2007). Most cities of the world follow the policy of increasing FAR with time to provide for increased living space demand of families instead of pushing them to suburbs (Bertaud, 2004).The effect of increased FAR on Mumbai might be different from what Bertaud expects since a sizable population here cannot afford more than existing space as there is no evidence stating the income generation in Mumbai to be egalitarian or has increased. The prime concern here is not of increased floor space for existing residents but of formalising the population settled in lower than average quality of living i.e in slums, due to lack of affordable houses in the city. In Shirish Patel's view, if at all FAR has to be increased, it should be in only rich areas as any increase of FAR in already cramped poor localities will lead to further "Crowding"[7] (Patel, Sheth and Panchal, 2007, p. 2734).

Bertaud (2010) criticises the constantly reducing FAR regulations despite of increasing slums, rising unaffordability of houses and a chaotic housing market. Internationally, the practice of capping the FAR at a higher limit than existing is also prevalent such that the old buildings redevelopment is facilitated (Bertaud, 2004). Contrastingly in Mumbai, FAR was changed from 3-4 (before 1964) to a FAR range of 1 to 4.5 (DP 1964) and finally to a uniform

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[6] The revenue generated from Fungible FAR is ring fenced for Infrastructure development as Infrastructure Development Fund, but its use is not limited to the revenue generating area.

[7] "Crowding" is a metric that measures number of persons per hectare for a given urban use (Patel 2013).

FAR of 1.33 in the Island City and 1 in Suburbs (DP 1991). Bertaud criticises MCGM for restraining itself from increasing the FAR for the fear of losing monopolistic power over development rights in the city (Bertaud, 2004). In fact, it has also been discovered that irrespective of per dwelling floor space, the land consumed per dwelling in formal and informal housing is more or less same (Bertaud, 2010). He even talks in favour of a steady supply of land and services to informal markets (Bertaud, 2010). Nevertheless, the scope of increase in FAR should be directly related to the investment in infrastructure in a particular locality (Patel 2005). Even though Bertaud's argument is reasonable for developed cities, considering how far we are from providing a decent standard of living to our populace; its applicability in Mumbai may be limited. Understanding the background of both the arguments, I surmise that the position of increase in FAR may be achieved in Mumbai after a certain minimum standard of living and living space is achieved for its populace and the argument against the FAR increase is of course applicable until that minimum standard of living is attained.

CONCLUSION

Undoubtedly, the planning in Mumbai has not been the most successful one. The DP and the accompanied DCR were unsuccessful in creating the right incentives and hence desired outcomes. The adaptation of FAR in Mumbai has been inclined towards the profitability of various agents. Ganpathy questions if it is the policy to be blamed or its implementation (Gopalan and Venkataraman, 2015). Even if good regulations are formed, they hardly get converted to reality due to poor implementation mechanism. Policies are made on the name of the poor but the reality goes against them. There should be a neat model that provides simplified rules and provides clarity about where the political economy has to stop as the laws of political funding are changing and often the politicians are themselves developers. Planning should be a long term goal that goes beyond the politician's myopic vision and their current administration term.

An increase in FAR in Mumbai must increase the stock of houses and should lead to a drop in prices. Albeit, this might happen once the existing unmet demand has been satisfied and the business of free housing is overthrown. With much poverty, these policies are bound to become futile at the implementation stage. All these policies are applicable after a threshold of median income is reached. With filtered approaches, the solution needs to be direct intervention with more of policy reforms. Creation of an enabling atmosphere and agents who are able to pick up the system is inevitable at this point.

Moreover, whether we choose high FAR and a compact city or decongested sprawled city with low FAR, the investment on infrastructure cannot be ruled out. While housing policies are important, they should be a part of a bigger comprehensive plan where all verticals are focused upon. The primary problem is not unaffordalibity but the social unacceptability of the amount of land that is available and its subserviced nature (Bertaud, 2010). Urban policies must be framed carefully. FAR should be prescribed on granular level based on the availability of infrastructure and services for respective plots. Understanding the inability of the poor to pay for the cost of land, they should be made liable to pay at the least cost of construction, creating equivalence between their stock of wealth and the flow of income. Policymakers need to recognise that those agents with agenda of making profits should stick to their orientation and not get into social welfare as this sphere cannot afford such high margins of profits. Public purpose is non-exhaustive and in pursuit of converging them through planning tools, bad policies take shape leading to bad outcomes.

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THE IMPACT OF THE RAILWAYS ON THE MODERNIZING OF MOSUL AND ISTANBUL BETWEEN THE LATE NINETEENTH AND MID-TWENTIETH CENTURIES

LINA YAQUB[11]

ABSTRACT

This paper will compare two cities in the late nineteenth to mid-twentieth centuries: Mosul, an important provincial city in northern Iraq, and Istanbul, an Ottoman port city and imperial capital in Western Anatolia. During this time, traditional cities transitioned to modern cities. Comparing the modernisation of Mosul and that of Istanbul enriches my research on the former city, and both represent connections as trade centers and strategic transportation stations, especially along the Baghdad–Berlin railway. This comparison will address the following aspects: (1) the railways' economic importance for Mosul and Istanbul; and (2) how the railway affected the reshaping and modernizing of Mosul and Istanbul, comparing the morphological and typological changes of the two cities.

Keywords: Mosul, Istanbul, Modernisation, Baghdad-Berlin railway.

INTRODUCTION

Exploring the development of transportation and railways and how they impacted the two cities will facilitate comparison of Mosul and Istanbul. Both fell under the same sovereign power, following plans charted through the German–Ottoman relationship. Going back to the 2003 study of Roth and Polino, *The city and the railway in Europe*, this comparison address the following aspects: (1) the railways' economic importance for Mosul and Istanbul; and (2) how the railway affected the reshaping and modernizing of Mosul and Istanbul, comparing the morphological and typological changes of the two cities. The second part of Christensen's 2017 book, *Germany and the Ottoman railways*, clarifies many aspects, including: Construction, *Hochbau* (or building construction), Monuments, and Urbanism. Christensen's analysis of Urbanism, and *Hochbau* will facilitate the comparative analysis here.

Several books and articles will be used in this comparison, some covering the impact of railways on reshaping cities in general, while others focus on Mosul and Istanbul specifically. To show the similarities and differences between Mosul and Istanbul, this paper will discuss four categories: (1) commerce, to analyse the railways' economic importance for both cities; (2) neighbourhood; (3) public circulation; and (4) the specific features and patterns of railway station architecture in both cities, which represent the morphological changes in urban and architectural form. Each of these aspects changed dramatically while the railways were established, with the root of the whole story starting in the late nineteenth century, when the commercial interests of both the Ottoman Empire and Germany increased in the region alongside the West's interest in Mosul. This pursuit is obviously represented in the project of the Baghdad–Berlin railway.

This periodic importance prompts study of the impact of railways from their beginning. Negotiation for this project began in the Hamidian period (1876–1909), which will be discussed to motivate the comparative discussion. Some events will be discussed during the period between 1909 and World War I. The period between the two World Wars will also be

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considered, which then leads to the more influential period, during which some of the stages of the Baghdad-Berlin railway were implemented. As I read about both cities, I found a chronological shift between them of about four to five decades. In other words, many scenarios that occurred in Istanbul later occurred in similar, updated form in Mosul.

THE RAILWAYS' ECONOMIC IMPORTANCE FOR MOSUL AND ISTANBUL (COMMERCE)

The great effects of the Ottoman Empire are clearly seen in Mosul's history. Exploring several studies of that period clarify how Mosul and Istanbul were related to their regional economies (Shields, 1991). Mosul was not only a source of raw materials for Western countries, but also a good market (*suq*) for their production. Looking at different periods, starting in the late nineteenth century, Shields (2000) studied the economic impact on the governorate itself rather than on international trade.[12] Shields (1991) early examined how Mosul is related to the regional economy, analysing many factors of regional development, such as agriculture, industry, and international trade. Similar tendencies in Istanbul were explored by Gül (2009), who clarified the genesis and the development of the relationship between Istanbul and the West. Concluding with the beginning of the twentieth century, Rogers (2007) explained one aspect of the international impact on Mosul in the period between the two World Wars.

One could not explore the economic activities of Mosul from the late nineteenth to early twentieth centuries without reference to Istanbul, because Istanbul's commercial changes during that period are integral to this understanding, and their economic activities greatly impacted each other. In this regard, Shields (2000) refers to the special role that Istanbul played during the last century of the Ottoman era, even more than the European role (p. 89), summarised by the following aspects: (1) Ottoman centralisation; (2) conscription; (3) new taxes; and (4) changing minority communities. Since the mid-nineteenth century, European influence on the Ottoman Empire increased (Gül, 2009) due to the obvious consequences of the Crimean War for Istanbul.[13] Direct contact between the inhabitants of Istanbul and British and French troops, even though limited only to bureaucrats and officials (Gül, 2009), influenced Istanbul, and the relationship between Istanbul and the West gradually increased.

We can better understand the role of the Germans in modernizing Mosul if we study the interrelationship between the Germans and Ottomans. Westernised or "Germanised" Istanbul led to the indirect Germanisation of Mosul. Together, the Germans and Ottomans established many institutions and offices to implement their shared ideas. This explains the reasons and roots behind the establishment of the Baghdad-Berlin railway, and it also clarifies the importance of having Mosul within this project. The Germans got permission to establish the Baghdad-Berlin railroad in March 1903 (Al-Adool, 2008); this project created conflict between the British and the Germans. The British aimed to prevent this railroad from reaching the Gulf region (Al-Janabi, 1992). However, the Germans' interest in Mosul was not only in establishing the railroad, but also in oil extraction. Their contract with the Ottoman government at that time included rights to excavate 10 meters on each side of the railroad for oil, as well as archaeological excavation (Al-Adool, 2008). The British also impacted the commercial prospects of Mosul. Their interests in Mosul well predated the mandate period. In 1909, Britain and Europe sent about 56.7% of all imports to Mosul. We can trace the conflicts in Mosul during this period between the most powerful countries and their effects on the economic situation and prosperity. As we see above, one of these conflicts evolved around the railway.

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[12] Before Sykes Picot agreement's division of Arab homeland.
[13] The Crimean War (1853–56) was between Russia and an alliance of Great Britain, France, Sardinia, and Turkey.

Consequently, we glimpse the deep interrelationship between Mosul and Istanbul and how plans to reshape the Middle East intensively involved both cities. This development increased the role of these cities and their economic activities both locally and internationally. Nevertheless, they witnessed many retreats, not only because of the political conflicts and impacts of war, but also because possessing these natural resources sometimes worked against their benefit. Two big famines happened in Mosul. The second was in 1917, a year that witnessed disastrous economic consequences in both Mosul and Istanbul. Even though that was another reason to discourage the establishment of the railway, the disconnected nature of Mosul was part of the reason for the famine, as assistance from other parts of Iraq could not arrive. Integrating Mosul into the rest of the surrounding area was another factor insisting it be considered part of the Baghdad–Berlin project.

All of these circumstances increased the need to reform the infrastructure of both Mosul and Istanbul. The Germans were famous for their accuracy and their preparedness, strengthening or developing the infrastructure of cities before starting any project. Here, a comparison between Mosul and Istanbul will show the features of each city's growth, whether global or local aspects.

Comparing the morphological and typological changes of Mosul and Istanbul. In Mosul and Istanbul, public circulation, neighbourhoods, and architecture were changed by the new infrastructure developments of the city to suitably include the new functions and communities that now came with the train. Christensen (2017) refers to the enormous impact of the Ottoman railway network on traversed cities' development in terms of architecture and urban planning, further discussing how these cities affected "knowledge exchange" through their buildings and maps (Christensen, 2017, pp. 141; 151).

PUBLIC CIRCULATION (IMPROVED TRANSPORT)

Even though modernisation in Istanbul and Anatolia began in the early eighteenth century and continued into the nineteenth century, the impact of the West became more obvious after the establishment of the Turkish Republic. At that time, the nation looked "to the West to seek ideas about how to mould and direct the development of its modern culture" (Gül, 2009, p. 1). Then, "single party rule and the principles advanced by Mustafa Kemal Ataturk"[14] influenced the country (Gül, 2009, p. 1). In this period, Turkey was aligned with selected Western countries and ideas socially, politically, and economically. The role of the railways is connected to the idea of modernizing and Europeanizing cities, especially those in the Middle East.

After the Crimean War, in 1853, Istanbul started to improve its public transport, bridges, streets, and public squares (Golden Horn in 1853). In 1872, an iron bridge replaced the old bridge between Unkapani and Azapkapi; this occurred six decades before the Nineveh (Ninawa) Bridge in the 1930s which connected the two banks of the Tigris. However, it can be said that both bridges reshaped their cities and facilitated mobility therein; in Mosul, the Nineveh Bridge strengthened the transport of goods between Baghdad and Mosul, competing with river navigation (Gül, 2009).

In 1874, the first railroad connected Istanbul and Sofia. Even though this was a "controversial topic," Sultan Abdülmecid strongly supported the establishment of railways. In this regard, Çelik mentions in *The Remaking of Istanbul* (1986) that the Sultan insisted on establishing the railways, describing that in his opinion "the trains must come to Istanbul, even

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14 Mustafa Kemal Atatürk (pronounced [mustaˈfä ceˈmäl äˈtäˌtyrc]; 19 May 1881 (conventional) – 10 November 1938, was a Turkish army officer, revolutionary, and founder of the Republic of Turkey who served as its first President from 1923 until his death in 1938 (https://en.wikipedia.org/wiki/Mustafa_Kemal_Atat%C3%BCrk).

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if they had to pass over his own back". (Celik,1986, p.100) The connection between Istanbul and Vienna officially opened Istanbul to foreign thoughts and westernisation by 1888. At that time, Mosul had not even entered the world of the railways, except only, perhaps, as a virtual station on the Baghdad–Berlin plan, then under negotiation between the Ottoman Empire and the western powers, particularly Germany (see Figure 1). During the Ottoman period, by the time the railroad crossed the residential area along the Marmara Sea, the urban–suburban route was soon in operation. Six certain stops along the railway became important stations, including Istanbul, Kumkapi, Yedikule, Bakirkoy, Yesilkoy, and Kückük Gekenec. The count of stations increased to eight by 1896. The distribution of stations led to connections among neighbourhoods around the railway's borders and between the far suburbs on one side and the city centre on the other side (Çelik,1986).

In the middle of the nineteenth century in Istanbul and beyond, there was a movement to modernise and Europeanise many aspects of the city, such as the transition to urban transportation (Gül, 2009). The plan was to insert a new "gridiron" syntax into the old organic urban fabric to make it more organised, as in, for instance, the suggested plan of Auric after the 1911 Aksaray fire (Gül, 2009, p. 69; see Figure 2). Al-Dewachi, Abdulah and Jalal (2010) addressed how the urban morphology of old Mosul witnessed the most changes between the beginning of the twentieth century and the early 1970s, mostly involving demolition of the internal castle (Edge Kalaa), opening of Nineveh Street (1914), opening of Nineveh Bridge (1934), establishment of the Baghdad–Berlin rail road, and changing land use from mostly residential to commercial use, especially for buildings along the new road (Al-Dewachi, Abdulah and Jalal, 2010). However, this work did not sufficiently explain the context causing these changes. It is important to understand the changes to the urban fabric, as discussed here, and the changing land use after modernisation.

Figure 1. Mosul 1911–1920. redrawn by the author using ArcMap [GIS], version 10.4.

Figure 2. Part of Istanbul 1912 plan, published in *The Emergence of Modern Istanbul* (Gül, 2009, p. 69), quoted as a published plan in Génie Civil Ottoman 1912, "showing the new roads proposed by Auric after the 1911 Aksaray fire".
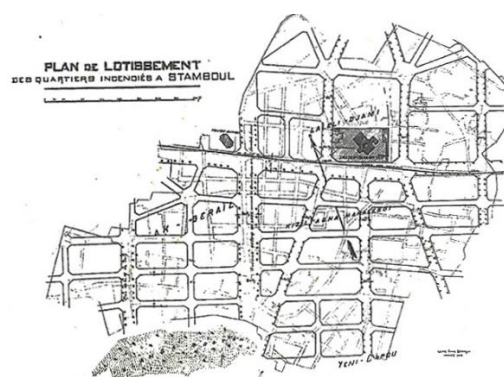
After World War I, the Turkish political system shifted to a "Western democratic model of government." Hence, Istanbul, like many other cities, expressed "a desire to adopt Western ideas" (Gül, 2009, p. 2). Which was combined with a need for a western-pattern city plan. Most

such plans were only on a map because of the "economic conditions that prevailed" (Gül, 2009, p. 2). As the Ottoman Empire collapsed, Istanbul was neglected; the new Republic chose Ankara the capital of modern Turkey. At that time, Mosul entered the era of the British Mandate, replacing the external power of the Ottoman Empire with another external power from the Western world. This could explain why, after World War I, Turkish rulers began to focus on Istanbul's development to create a central power in the Middle East rather than control many separate provinces. By the time the railway started to operate, after 1940, the expansion of land and population was on the right side to serve the railway, its attachments and its services.

New *Jadas,* or streets,[15] that were opened in Mosul in 1913 and after had the obvious aim to connect the agricultural land on the left side to the railway on the right side. Even though this was not declared at the time the streets opened, it was later clear how the extension of Nineveh Street facilitated this connection. The period between the two world wars witnessed many changes. One part of the morphological changes, as emphasised by Al-Dewachi, Abdulah and Jalal (2010), concerns the intercalated streets and roads to fit the needs of new transportation tools (as is always happening when roads interpolate the traditional urban fabric). For instance, the opening of Nineveh (Ninawa) Street in 1913 caused the demolition of the traditional Nineveh castle, which represented a monument to heritage in the old city of Mosul (Al-Dewachi, Abdulah and Jalal, 2010). Al-Dewachi, Abdulah and Jalal (2010) articulated these changes by studying the spatial organisation of the city before and after the interpolation of these streets. Nineveh Street was opened during the period of the last Ottoman ruler in Mosul, Salman Al-Nadhif, and it continued a big dream of Abdülhamid II and Abdülmejid (Abdülmecid), the Ottoman Sultans dedicated to establishing railways in their empire. The main aim, aside from a connection to the west and facilitation of soldiers' movement during the First World War, was to control and facilitate commercial activities and trade within their empire and with the West. On the other hand, it also aimed to facilitate the moving of Western experts and engineers.

Al-Dewachi, Abdullah and Jalal (2010) presented modernism in Mosul as having a destructive impact on the city by prioritizing economic matters over historically important structures. They argue that even though the modernizing approach developed the city of Mosul and re-invigorated its international trade by connecting both sides of the river with the Nineveh Bridge and the railroad through Nineveh Street, the approach ignored the historical value of the traditional fabric of the city. Furthermore, this modern strategy ignored the conservative necessities for the valuable edifice of the city, such as the Mosul castle, and the trade centre (Suq) itself, which divided the old city of Mosul into two separated parts (Al-Dewachi, Abdulah and Jalal, 2010). The economic interests of powerful countries in Mosul was the main reason for the consequential opening of the Nineveh Bridge in the 1930s, facilitating the transmission of raw materials from the fields on the east side of the Tigris River to the railroad on the western side. Al-Adool (2008) discussed the role of the railroad in the flourishing economy, referring to the colonial benefits and activities in Mosul (Al-Adool, 2008). In Mosul, the commercial use of land occupied the edges along each main road, which changed the central power of the Great Mosque and the churches scattered throughout the city (approximately 30 of the 70 churches in Iraq are located in Mosul). In the Old City, commercial activity was limited to the *Suq*; after modernisation, these commercial activities spread along both edges of the main axis. Residential and commercial spaces mixed together, which provided opportunities for different religious groups to share the same public spaces and interact with each other in unprecedented ways.

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[15] *Jada* is a common name for streets.

Later, between World War II and the end of the Menderes Period (1945–1960), an advanced level of transition began. In Istanbul, Gül's *The emergence of modern Istanbul: transformation and modernization of a city*, clearly reveals the chronological transitions of Istanbul, especially during the period of modernisation. Gül documents the transformation of Istanbul from a random into a modern city. The planners' aim at that time was to regulate the city's chaotic planning; the infrastructure and most services had no suitable administration to maintain it. The goal was to create a metropolis with organised and large avenues. The planners and architects tried to enhance the urban form and to reform many traditional street patterns from the nineteenth century to establish a gridiron street system for Istanbul. This was closely followed to the suggested plan of Auric after the 1911 fire (Gül, 2009). Even though Istanbul witnessed fluctuating urban changes according to political shifts, the critique against modernisation in Istanbul was most crucial during the Menderes era. One of the most attractive periods of modern Istanbul occurred when the city was in Menderes' hands (1956–1960). Gül quotes Menderes as saying: "Istanbul's redevelopment is a story of a triumphal parade. We will conquer Istanbul one more time. Not only Istanbul, we will also reconquer Ankara and all other cities" (Menderes, quoted in Gül, 2009, p. 140). Although Menderes was executed in 1961, Gül objects to the negative attitude directed towards him by many architectural and urban historians.

Architects and urban planners critiqued Menderes for making decisions without understanding the context. Menderes outlined his "urban renewal" program as "reducing traffic congestion; regularizing existing street patterns; demolishing buildings in the vicinity of grand mosques; opening large avenues; and increasing Istanbul's attractiveness for foreign visitors" (Gül, 2009, p. 147). From this outline, we can infer that meant to regularised existing streets, which sounds acceptable since such streets already existed. This stands in contrast to Nineveh Street in Mosul, which, according to several scholars, cut through the fabric of a residential area, fragmenting it into isolated areas. Al-Dewachi, Abdulah and Jalal (2010) syntactically analysed this fabric, concluding that the new roads had an isolated impact within the city of Mosul. Similarly, Al-Kubaisy (2010) assumed that the modernisation of the Old City of Mosul occurred randomly: "the Old City has not been adapted to modern living standards, and many of its buildings give the impression of decay" (Al-Kubaisy, 2010, p. 22). However, I think the insertion of new roads and bridges led to clear changes in the social life of the city of Mosul. As I mentioned previously, residential and commercial spaces mixed together, which led different religious groups to share the same public spaces and interact, especially along Nineveh Street.

Returning to Istanbul, several architects and urban planners stood against Menderes's plan to develop Istanbul. Gül defends the response of Menderes, especially in that Menderes's program was "based on the idea of opening up large boulevards throughout Istanbul, in common with many of the politicians of the post-war era, he was much influenced by the magic of highways" (Gül, 2009, p. 146). The position of some Turkish architects and urbanists against Menderes pushed Gül to explore the other side of the story. The opposite stance has been supported by plenty of work. One of the most dialectical reviews of Gül's book is by Akcan (2012).

According to Akcan (2012) this interpretation of Gül "ignores the decades long influential literature on the old Turkish houses and Istanbul's wooden houses produced by the most sophisticated authors and architects of the period [which] included Sedad Eldem, Ahmet Hamdi Tanpinar, Resat Ekrem Kocu, Abdulhak Sinsi Hisar and many others." (Akcan, 2012, p. 214). They stood against Menderes' ideas even though they were not aware that he put his plan in public for discussion and "provided assurance on the right of property owners" (Gül, 2009, p. 146).

Figure 3. Mosul 1944, redrawn by the author using ArcMap [GIS], version 10.4.
Figure 4. Istanbul 1931–32 (Gül, 2009, p. 81) "redevelopment proposal".

NEIGHBOURHOODS

During the Ottoman Empire, neighborhoods of the old city of Mosul were organised differently from other old cities in the Middle East, in terms of urban form and locations. It is physically described as a big, unilateral neighbourhood, unlike Istanbul with its isolated neighbourhoods. However, this connectivity of the residential fabric in Mosul was not obvious in the social relationships among diverse groups in terms of religion, ethnicity, and language.

ARCHITECTURE (COMPARING THE RAILWAY STATIONS OF MOSUL AND ISTANBUL)

The two buildings' forms will be described by adopting the main principles of Gestalt perception theory, including balance, rhythm, proportion, harmony, continuity, closure, proximity, figure-ground, and similarity. These qualities will be compared between the two buildings. The railway station of Mosul was built in 1930 in a modern style. The train station in Istanbul, Sirkeci Railway Station (the Terminal Building), architecturally combined western and local styles and values, which incorporated the late nineteenth-century urban image (Çelik, 1986, p. 99, 100). Mosul's station by contrast, was more similar to a twentieth-century, modern or abstract form (see Figure 5 and Figure 6).

Figure 5. Mosul Railway Station (1930s) published in Professor Ibarahim Al-Allaf blog (Al-Allaf, 2017)

Figure 6. Sirkeci Railway Station - Istanbul 1889, published on en.wikipedia.org

https://en.wikipedia.org/wiki/Sirkeci_railway_station#/media/File:Bahnhofsfront-Istanbul-Sirkeci_retouched.jpgx

In the years between 1850 to 1940, there were neither methods of technological communication nor social media, and international expositions were the best means to gather together architects, artists, and any other specialists in the visual fields. In this way, people from different places learned about the most recent developments and took back home the things that they discovered about the art and architecture of other countries and regions. The flourishing period of the universal exposition was the second half of the nineteenth century (Çelik, 1992). Some Turkish buildings exhibited in the period between 1850 and 1940 combined "Beaux-Arts principles with elements of the local architecture: the large eaves and bay window were borrowed from Turkish houses" (Çelik, 1992, p. 158). Other buildings were an exercise in a purely Turkish–Islamic revivalist style. The unintentional aspect is clear through the Western impact on the Near Eastern architecture in the emergence of exhibitions. This began a long "dialogue" between Western and Eastern Islamic architecture, and the contact between these two architectural forms may also be seen in commercial and international expositions. Çelik analysed the impact of "non-European" arts on the West. However, Rudolf Witthower argued that "Western civilisation incorporated non-European forms into its own sphere [through] a triple challenge of ascending complexity: from the importation of non-European material, to its assimilation and adaptation, to its complete transformation" (Çelik, 1992, p. 178). This correlation between Near Eastern and Western architecture was clear during this period, and the architecture of "Mudéjar"[1] ("tamed; domesticated") was active in the sixteenth century during the "Mudegeres" age. Later, in the late-nineteenth and early-twentieth centuries, the abstract form of this correlation was clear in exposition architecture.

The Terminal Building reflects the clear adoption of Gothic forms over abstract natural forms in several different ways. This building has a frequent rhythm of Islamic arches, ending with two square towers that have different features compared to the rest of the building, which provides unity to the facade. Many factors create a balanced façade, including the variable rhythm of differently sized arches and the windows and towers. These diverse elements are conceived as proportional by the observer. Units can be either external or internal. The central arched gate harmonises the multiple windows, creating unity between the arch, the towers, and the entire building. The terminal building features this ornament through interaction with Gothic architecture. Gothic Revival, according to Gelernter, received further philosophical justification in the middle of the nineteenth century from the widely read and highly influential British architectural critic John Ruskin (Gelernter, 1999). The windows of the Terminal Building imitate both the Western and Eastern versions of natural abstract form. Usually, in Gothic architecture, a central, circular window was dominant, taken from the middle of the cathedral façade, but here, in the Terminal Building the repetition across the façade of a similar

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[1] This was the name given to individual Moors or Muslims of Al-Andalus who remained in Iberia after the Christian Reconquista.

window of a smaller size represents the repetitive rhythm of Islamic architecture. The outer porch of a Turkish building is a good example of this repetitive rhythm (see Figure 6).

CONCLUSION

In conclusion, researchers of the morphological and typological changes of both Mosul and Istanbul have been divided into two opposite teams: modernist and conservative. It could be inferred that several studies, especially those of architects, have adopted one side of history, because they mention the destructive consequences of changes without discussing the different events and facts behind them. However, when the train came through the city and led to the opening of roads, it was soon understood that the local connection with Baghdad led to interactions among people from different religions, ethnicities, languages and backgrounds. Architecturally, there are many similarities between the Terminal Building and the Mosul Railway station. The term "civilisational dialogue" was often used by Arab architects and artists when talking about Islamic architecture and its relationship to the West. According to these scholars, this architecture was impacted by the "Hellenistic architecture" of the West. So, Islamic forms were filtered through the abstraction of forms adopted from the West into a new version of the forms, which were later re-exported to the Western world (Zinati, 2014). However, there are also many differences between these buildings, mainly that the western style in the Mosul Railway station is bolder than the eastern one. Still, the acceptance of new and bolder forms was more restricted in eastern regions, especially in Islamic architecture. We can infer that much of the period witnessed diverse agendas from European architects. Socially, establishing a new railroad and new railway stations also created the development of new kinds of neighbourhoods in the form of railway houses, which connected the Old City of Mosul to Mosul's railway station. Consequently, Nineveh Street in Mosul expanded alongside the creation of railway workers' housing, thus quickly reshaping the social life of the mix and mingle who worked in the same street, travelled the same railway and transformed Mosul into a city of coexistence. This strategy could be adopted in our contemporary times to elevate social reality in the city of Mosul.

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15.CI23-1724

IRAQI MARSHES: THE SAFE HAVEN HISTORIC JOURNEY TO THE NOTION OF IRAQI MARSHES AS A SAFE HAVEN FOR IRAQIS

ORANS AL-BEHADILI [1]

ABSTRACT

The Iraqi Marshes are considered part of the cradle of civilisation dating back 5000 years ago. There is a tragic history to these Marshlands, not only did an unparalleled culture inhabit them, they also served as a safe haven for large numbers of other Iraqi peoples since time immemorial. The Marshes as safe havens has been repeated more than once in Iraq's long history, starting with the wars between the Assyrians and the Babylonians, passing through the Umayyad and Abbasid periods, during the Ottoman occupation, and finally after the end of military operations in the 1991 Gulf War. This paper aims to address the question: what made the Marshes of Iraq a safe haven for people throughout most of the documented history? In the process of answering that question, this paper will look how the environment can be used as a weapon to suppress people.

Keywords: Iraqi Marshes, Safe haven, History.

INTRODUCTION

The oldest texts pointing to the Marshes of Iraq date back to the *Epic of Gilgamesh*. There are passages in this legendary story that refer to the emergence of these bodies of water and the building of boats. In Assyrian and Babylonian paintings and reliefs we can see an embodiment of the world's Marshes. Moreover, many studies link the emergence of the Marshes of southern Iraq with Noah's flood story (Kubba, 2011). Until the operations of drying up the Marshes of southern Iraq began during the early nineties of the last century, unique tribes such as Albu Muhammad, Albu Hassan, Feraigat, Malik, Bani Tamim and Bani Assad lived in these wetlands, with an astounding culture found nowhere else on earth (Kubba, 2011). That singular group of people, with their social habits, reed houses and boats, found a synergistic way to coexist with the harsh yet fragile environment that lasted more than 5,000 years.

A number of wars throughout documented history give testament to this concept of Iraqi Marshes as a safe haven. In 728 B.C., when the Assyrian King Sennacherib battled the Babylonians, the soldiers of Babylon withdrew to the Marshes (Kubba, 2011). During the Umayyad rule, 662-750 A.D., many revolutionaries evacuated to the Marshes (Al-Khyoon, 2007). Continuing on from 750-1258 A.D., those persecuted under Abbasid rule resorted here (Thesiger, 1964). Moreover, during the Ottoman occupation, 1534-1917, the rebels retreated to the safety of the Marshes (Kubba, 2011). The arrival of the British army in Al-Basra in 1914 heralded a new era; the Marshes became a military zone of operations. The six month siege of Kut (1916) saw dramatic numbers of military based operations here (Knight, 2013). Eventually, in the spring of 1991, during the uprising in southern Iraq, the revolutionaries retreated to the Marshes after their suppression. In order to punish them, the authorities at that time began the process of draining the Marshes. By 1999, the Marshes were lost. This paper is an attempt to read what happened. It is an effort to restore what happened in those dark days of March 1991 in Iraq, when the uprising in southern Iraq against the dictatorship was severely suppressed.

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THE BEGINNING OF AUTUMN AND THE MIGRATORY BIRDS

When I was a child, one of the most amazing moments for me each year was the onset of autumn in Iraq. I would stand on the roof of our old house and watch the migratory birds flying in the sky. At that time, I did not know that these birds were flying in their seasonal migration from the north (Siberia and northern Europe) to the south (Africa) and using the Marshes of Iraq as a temporary station in that long migration route. All I knew was that I loved the advent of autumn, because it meant the end of the sweltering summer. Then, as temperatures began to gradually decline, the afternoon hours became moments of beauty, and soon after, swarms of migrating birds started to appear in the sky; thus were the afternoon hours in the autumn at that time in Iraq before dramatic climate change in the 1990s. Since the middle of the nineties, the migratory birds have not flown across the skies of Iraq. Additionally, something in the climate began to change slowly. This change was not a rapid transformation, and for this reason, it took some time to realise that the thing that was missing at the beginning of autumn was not only the beautiful noon hour, but it was the disappearance of the migratory birds. And it took a few more years to realise that the reason for this disappearance was linked to the draining the Marshes of southern Iraq.

In a closed society, governed by a dictatorial regime, with a mass media that was limited and controlled completely by that regime, it was not possible to hear or read anything about what was happening in the Marshes of southern Iraq, especially in the period following the suppression of the uprising in the south after the end of military operations in the Second Gulf War in 1991. And more frighteningly, the true facts were being manipulated. I clearly remember the official Iraqi channel – at that time – which offered documentaries on the digging that was taking place in southern Iraq, they called that project the third river. At that time, the media promoted that this river would be a parallel river of the Tigris River and would help in the irrigation of farmland, but in fact, this project was a giant channel pulled from the water of the Marshes in order to drain them.

In May of 2003, after the end of the military operations, I was watching a documentary broadcast from the temporary Iraqi television – at that time – and one of the segments of the program discussed the attack on the Marshes. This was the first time that I ever saw an explanation of how the draining of the Marshes was being done. Then I remembered the migratory birds and I realised they were not flying in the skies of Iraq because their historical station in southern Iraq was dried up and destroyed.

But we must ask, when was the beginning – the beginning of that charming and strange world of Marshes? Since the beginning of civilisations, more than 5000 years ago, there were Iraqi Marshes. In his book *The Iraqi Marshlands and the Marsh Arabs, The Ma'dan, their culture and the Environment*, Kubba indicates that, "several of the world's first records of the civilisation lie on the fringes of the marshlands, including Ur, Uruk, Eridu, Larsa, Lagash and Nina" (Kubba, 2011, p. 9). Additionally, Thesiger points out in his book *The Marsh Arabs*, "it was on the edge of the Marshes that human history in Iraq began" (Thesiger, 1964, p. 89). In the Epic of Gilgamesh we can read the following phrases on the story of the flood: "O fence of reed! O wall of brick! Hear this, O fence! Pay heed, O wall!O man of Shurrupak, son of Ubara-Tutu, demolish the house, and build a boat, abandon wealth, and seek survival" (George, 1999, p. 89). These lines mentioned in the Epic of Gilgamesh connected the emergence of the Marshes with the well-known story of the flood. It is not only interesting that the history of humanity appeared in the Marshes or that throughout their long chronological age of 5000 years, reed houses have remained dwellings for the inhabitants, but even more interesting is the implicit signal that the Marshes are a refuge or safe haven.

Any person studying Iraq (Mesopotamia) will observe that a large number of wars and upheavals have occurred in this country throughout its history. Stephen Bertman refers to this fact in his *Handbook to Life in Ancient Mesopotamia*, writing, "the geography of Mesopotamia

encouraged war" (Bertman, 2003, p. 262). It seems that the distinctive geographical nature and unique location of Mesopotamia was the reason behind the frequent wars. Bertman argues in his book that the existence of two major rivers in a fertile plain was one of the most important reasons of Mesopotamian's population suffering from successive attacks by their neighbors (Bertman, 2003). Bertman reaches the conclusion that, "to life in Mesopotamia, therefore, warfare was a natural condition" (Bertman, 2003, p.262). The scholars interested in the history of wars and upheavals in Iraq will note a frequent phenomenon linked to the strange world of Iraq's Marshes. This observation is not about its existence itself, nor about its exclusive characteristics – all of these things are well-known. It is about the fact that this unparalleled place in nature (Marshes) provided a safe haven for many Iraqis during the period of wars and crisis throughout history. Thesiger mentions that, "the marshes themselves, with their baffling maze of reedbeds where men could move only by boat, must have afforded a refuge to remnants of defeated people, and been a center for lawlessness and rebellion, from earliest times" (Thesiger, 1964, p. 95). It is useful here for a brief historical review of Iraq to track the various historical stages where the Marshes were a safe haven for a number of Iraqis.

Fundamentally, the first and oldest references to the fact that the Marshes have been used as a safe haven for those seeking a refuge is found in Assyrian reliefs. The readers of the history of the Assyrian state will find that it was a history of a series of wars. Within Mesopotamia, the Assyrians were mountain-dwellers who conquered the residents of the lower plains, the Babylonians (Bertman, 2003). One of these wars with Babylon led to its destruction in the end. Thesiger indicates that, "in 728 B.C. the terrible Assyrians, with horse-drawn chariots and weapons of iron, wiped out the Amorites and razed Babylon to the ground" (Thesiger, 1964, p. 89). The first attempt by Sargon II, the great Assyrian king, to conquer Babylon did not succeed (Kubba, 2011). However, his son Sennacherib, achieved this goal. Enrico Ascalone mentions in his book *Mesopotamia: Assyrians, Sumerians, Babylonians* that, "Sannacherib dedicated most of his efforts to conquer Babylon, which he fought, laid siege to, and finally destroyed" (Ascalone, 2007, p. 69). This battle ended with the escape of the Babylonian king and his soldiers into the depths of the Marshes to escape the pursuit of the Assyrian soldiers. Kubba (Quoted from Roux, 1993) refers to this incident:

> *Historically, the dense reed beds which only small boats were able to penetrate, created a safe haven for Chaldeans, who defeated the Assyrian ruler Sargon in the 7th century B.C., it was written that the king of Babylon "fled like a bird to the swampland" and the King of Assyria "sent warriors into the midst of the swamps…and they searched for five days" but the King of Babylon could not be found.* (Kubba, 2011, p. 10)

The Assyrian king recorded these events in the friezes discovered in South-West Palace, in Khorsabad (Thesiger, 1964). A collection of Assyrian friezes and a wall relief preserved in the British Museum show how the Assyrians persecuted their enemies in the depths of the Marshes and how the Babylonian soldiers hid among the reeds and papyrus to escape the Assyrians. These inscriptions discovered in Assyrian palaces in Nineveh and Khorsabad document the first attempt to resort to the Marshes in southern Iraq.

The retreat by the Babylonian king and his soldiers into the Marshes of southern Iraq may have been the first case in history, but, it was certainly not the last. After a couple thousand years, multiple revolutions and insurrections occurred during the period of Umayyad rule (662-750 A.D.). Most of these upheavals occurred in the geographic region known today as Iraq. Al-Khyoon points out in his article *Iraqi marshes, history of water and drying* that the Umayyad ruler, Al-Hajaj tried to erect dams in order to arrest the water supply for these Marshes in an attempt to dry it (Al-Khyoon, 2007). However, technological limitations thwarted his attempt.

Like its predecessor, Umayyad state, Abbasid state (750-1258 A.D.) faced many upheavals and revolutions. Thus, there were many cases of fleeing to the Marshes. Two of the most prominent of these refugees were the Abbasid caliph al-Qadir, who fled from the other Abbasid Caliph Al-Taii, and the judge Abu Ali Al-Tonochi (Al-Hasnawi, 2004). The main

event during the Abbasid period that took place partially in the Marshes was the Zanj revolution. Lasting fourteen years, it was the longest rebellion of its time, 869-883 A.D. Thesiger says that, "the Marshes were the stronghold of the Zanj, whose rebellion threatened the very existence of the Abbasid Caliphate" (Thesiger, 1964, p. 95). One must ask, why did these rebels resort specifically to the Marshes of southern Iraq to be a stronghold of their armed revolution? Faisal Al-Samir in his book *The Zanj Revolution* argues that the nature of this region and the fact that it is full of bodies of water and swamps made this revolution go on for so long, because it was difficult for the enormous Abbasid armies to fight in this maze of water canals surrounded by reeds (Al-Samir, 2000). The revolution of Zanj ended in failure, but it has succeeded in stabilizing the fact that the Marshes in southern Iraq as a safe haven for those who want to rebel or revolt in this troubled country.

Cases of retreat to the Marshes did not stop there. During the Ottoman occupation of Iraq (1534-1917 A.D.), southern Iraq was a troubled region. Armed confrontations between Arab tribes in that region and the Ottoman army were constant. The Ottoman authorities sent one military campaign after another in an attempt to control the region, but to no avail. The Marshes were always a refuge for Arab tribesmen after their battles with Ottoman armies. The tribesmen easily disappeared among the reeds and in the endless paths of Marshes where the Ottoman authority could not track them down (Young, 2009). Kubbah writes that;

> it should be noted that the Ottoman Turks with all their power were unable to impose even a semblance of authority over the Marsh dwellers during their rule and between 1625 and 1668 and between 1694 and 1701, it was the local sheikhs that ruled the marsh area and Basrah and completely ignored the Ottoman governor of Baghdad. (Kubba, 2011, p. 12).

Many years later, the British army arrived in Iraq in 1914 during World War I, and Al-Basra in southern Iraq was the first Iraqi city that the British army entered. In the period between 1914 and 1915, many battles occurred between the British army and the Turkish army in the north of Basra (Marshes area). One of the most famous of these battles was the battle of Kut, known as the siege of Kut al-Amara. In that battle, the defensive lines of each of the two armies stretched along the Marshes area (Knight, 2013). That period witnessed, until the founding of the Iraqi state in 1921, many clashes between the British army and the Iraqi tribes in southern Iraq. As usual, the Marshes were the safe shelter during that period of crisis.

This long history of resorting to the Marshes after moments of crises leads to the necessary question: What made the Marshes of Iraq a safe haven for people throughout most of the documented history of Iraq? Furthermore, what made the Southern Iraqi Marshes a safe haven – refuge – for the revolutionaries, rebels or outlaws permeating Iraqi history? Geographically, the Marshes in southern Iraq are a vast maze composed of complicated waterways between endless rows of reeds and papyrus. The Marshes of Iraq are enormous areas of water and reeds and small, scattered islands. At the points where these islands were connected, they formed villages. It looks very difficult, or perhaps impossible, for any conventional military force, or regular army to control this exclusionary geographical region. Perhaps, that exclusive geographical position was the first and the main reason that made the Marshes a safe haven throughout the ages. A central reason that made the Marshes of Iraq an ideal safe haven is that this unique place provides all the means for the survival of these refugees after they arrive to these wetlands without any support from or connection to the larger world. This closed world of the Marshes, this impossible breakthrough world, contains a unique wealth of animals, fish and birds. A quick look at the list of food wealth gives us a clear idea of self-sufficiency among residents of the Marshes. There are many types of fish, such as Al-Bunee, Al-Qataan, Al-Shaboot, Al-Hamree and Al-Saboor (Al-Hasnawi, 2004). As for the birds, there are migratory birds (that use the Marshes as a temporary station on the way of their long migration from north to south) as well as non-migratory birds such as Al-Khothairee, Al-Garnooq, Al-Qarqee, Al-Borhan, Al-Gataas (Al-Hasnawi, 2004). Additionally, there are many

other species of animals such as water buffalo, cows, turtles. (Al-Hasnawi, 2004). If we add to this the availability of food and the abundance of water, we are able to understand the reason behind these frequent refuges to the Iraqi Marshes. The Marshes of southern Iraq are like a fortified, self-sufficient castle. It is the timeless Iraqi fortress of water and reeds.

In reality, the Iraqi Marshes were not a river or lake or swamp area. Iraqi Marshes were a unique type of wetlands. Thus we should ask, is the constant resorting to the Marshes in Southern Iraq only for geographical reasons or is there another reason? In his book, *Space and Power*, Paul Hirst discusses "the various ways in which space is configured by power and in which space becomes a resource for power" (Hirst, 2005, p. 3). Is the power that the Iraqi Marshes possessed, which made the people flee to it, a power resulting from only characteristic geographical factors? Or does this ambiguous place, which is described in some sources as the *Garden of Eden* possess another kind of power? (Kubba, 2011). Is that power held in the secrets of sleeping civilisations among the reeds, which granted safety for those scared people? If we try to assume that this place is actually the legendary position of Garden of Eden, is there an invisible sense that led people to resort to their lost paradise when they felt threatened? All of these questions seem reasonable and logical, and anyone interested in studying the history of the Iraqi Marshes would contemplate them. But prior to 1991, a particular question seemed unbelievable: Is there any person who would dare to destroy this unrivaled geographical area?

One text gives us a scary prophecy for the future of the Iraqi Marshlands. In his last trip to the Iraqi Marshes in 1984, which he wrote about it his book: *Return to the marshes*, Young (2009) wrote the following fatalistic words:

> *I hear – whether correctly or not – that the army's defensive lines were much strengthened and deepened and ran back to embrace tracts of the central Marshes. This would mean that extensive areas have been drained and others flooded. If so, numerous Marsh villages could have been evacuated (perhaps Al Qabab, perhaps Rufaiya), and, if so, Heaven knows where their inhabitants have ended up. I fear – my heart sinks when I think about it – that the abrupt uprooting I spoke of may have come about. I s that the end of the Marsh Arabs? Are those thousands of years of exuberant life buried in this twentieth century shambles?* (Young, 2009, p. 178)

Young ends this paragraph with these words, and with it he concludes his book: "The Marsh Arab's way of life is horribly vulnerable. I take what comfort I can from the thought that only a fool would forecast the death of the world's oldest and perhaps wiliest people" (Young, 2009, p. 178). Young wrote these words in 1984. Merely fifteen years later, in 1999, the Iraqi Marshes were completely drained and dried, and its people had been forced to migrate from their historical homeland. My heart also sank when I read Young's words for the first time. That same pain returns whenever I re-read it. How could Young predict with such accuracy and intuition the coming danger which would destroy the Iraqi Marshes seven years before its arrival?

Young left the Marshes of Iraq that year (1984), never to return again. He could not see what happened to the Marshes of Iraq a short time later. I think I can describe some of what happened. Large parts of the Marshes were the frontlines during the First Gulf War, 1980-1988. While some battles had already occurred in the Marshes, sometime after 1985 saw the first real attack on the Marshes themselves. From television news at that time, I remember that the authorities started a big campaign to cut the reeds down in the Marshes. The reason used to justify these vast cutting operations of reeds was that the presence of the reeds in the Marshes hindered military operations. I do not know if there were any statistics that explain the range of the damage to the reeds or the range of the actual spaces that have been stripped from reeds. But, when the process of drying the Marshes was started after 1991, it became clear that the drying process was not the first attack by the authority against the Iraqi Marshes.

In March 1991, after the end of the military operations in the Second Gulf War, a big revolution occurred in northern and southern Iraq at the same time. The uprising of the south

was very harshly suppressed by the Iraqi authorities at that time. After the elimination of that uprising, large numbers of revolutionaries tried to find a safe place. Some of them succeeded in reaching the neighboring countries of Iraq, while others headed for the historical Iraqi safe haven – The Marshes. This was not the first attempt to resort to the Marshes in Iraq's history – unfortunately, it was the last. In fact, many attempts to find a safe refuge in the Marshes has happened in different periods of time, including a very important historical example. That attempt is not only important because of the situation to resort the Marshes itself, but because of the way the governor of Iraq at that time used the Marshes when he tried to eliminate the refugees. Approximately 1000 years ago, specifically in the Umayyad period, Al-Hajaj (an Umayyad ruler) tried to dry the Marshes of Southern Iraq (Al-Khyoon, 2007). It is clear that Al-Hajaj's attempt did not succeed because at that time there were no technological possibilities that make this task possible. Unfortunately, the task that was impossible in Al-Hajaj's period, became possible after 1991. After the elimination of the uprising in southern Iraq in 1991, the Iraqi authorities - at that time - pursued the revolutionaries in their last safe haven – The Marshes. Because military operations - in their traditional form - are almost impossible in the Marshes, the Iraqi authorities at that time decided to deprive these refugees from that safe haven and they decided to begin the process of drying the Marshes.

Drying operations began in 1991. The operation of drying the Iraqi Marshes ended in 1999. Only the northern part of the Marsh of Al- Hawizeh, which is located in the area adjacent to the border between Iraq and Iran remained. Al-Rubaii writes that, "in 2003, the only remaining area of the original Iraqi Marshes was only 7%" (Al-Rubaii, 2008, p. 438). The operations of drying the Marshes were divided into 5 stages. Al- Hasnawi indicates that "during these stages, soil dams were established on the Tigris and Euphrates rivers, and canals to pull the water from the Marshes of Al-Hawizeh and Al-Hamar were also established. Finally, the Marshes themselves were fragmented and the villages were isolated from each other" (Al-Hasnawi, 2004, p. 195). The goal of all these processes was to deflect the original path of the Tigris and Euphrates, which have fed the Marshes with water for 5000 years, and to channel some of it far away from the Marshes. In addition to the process of depletion, the water of the Marshes was transported to other places.

By 1999, the largest area of the Iraqi Marshes was almost dried. Thus, the destruction process of the cradle of Sumerian civilisation was complete. The Iraqi Marshes that had been a safe haven for each person who took refuge for 5000 years, turned into an environmental weapon used by the Iraqi authorities at that time to punish the revolutionaries and all Iraqi people in the South of Iraq, and after that, the whole Middle East by destruction of that irreplaceable ecosystem which regulated the environmental balance in the entire region. The ability of the Marshes to support life for those seeking a safe shelter was indeed the cause of the destruction of these unique wetlands by the Iraqi regime at that time.

CONCLUSION

In all likelihood, if the Marshes of southern Iraq had been simply an example of unique geography, they would not have garnered an important place in Iraqi memory. But, another aspect permits them intense power in Iraqi memory – they were a place of refuge. Throughout history Iraq has endured one upheaval after another. During all of these troubled periods, over the course of 5,000 years, the Marshes remained a safe haven for anybody in danger. In war after war, the vanquished took refuge here. After the end of the last Iraqi uprising in 1991, the drying of the Marshes began. That latest offensive on the Marshes, which led to their drying was not the first one in history. Every time people resorted to the Marshes, the authorities at the time would launch an attack on these water bodies in order to eliminate these refugees or to force them out of the region. However, each time the authorities attacked, it ended in failure. In the latest offensive on the Marshes, it appears that the Iraqi authorities realised that the traditional methods of attack or use of the regular army would not do any good in the elimination

of the revolutionaries who took refuge in the Marshes. The process of drying the Marshes was not only one action in the series of repressive operations carried out by the former Iraqi regime against the Iraqi people, but it was an attempt to fight the Iraq memory also. The Marshes in Iraq's memories were the last safe haven and the lost paradise. Iraq's most enduring safe haven is gone now; there is no longer a safe harbor.

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16.CI18-1718

IMPLEMENTATION OF TRANSITIONAL JUSTICE IN TAIWAN:THEORY AND PRACTICE

JULIANNE YICHEN LIN[1]

ABSTRACT

The importance of transitional justice became increasingly apparent throughout the 1990s, when the democratic transitions of countries Huntington (1991) designated as belonging to the "third wave" entered their final phase. The Republic of China (Taiwan), as a new democratic state in the Asia-Pacific region, is facing a post-democratisation phase of emerging social consensus. The trajectory of moving forward to democracy in Taiwan has involved large scales of injustice, authoritarian remarks, massacres and unidentified perpetrators from 1945 to 1992.

The high-tension period of authoritarian rule left historical scars, pending criminals and injustice for victims and their families. It is difficult for a society to reduce confrontation and hostility without psychological forgiveness or healing. Transitional justice involves investigating past crimes, imposing sanctions on perpetrators, and providing reparations to victims. It could also be a process to resolve differences and injustice in society and to further foster social reconciliation.

The current government of Taiwan established a Transitional Justice Commission responsible for the nation's historic restoration and reparation in cases of injustice. By reviewing international practices and approaches in promoting transitional justice, this research focuses on how transitional justice can be realised in Taiwan, particularly emphasizing the change of political climates and government policies for the post-authoritarian regime.

Keywords: Transitional justice, Taiwan, Truth commission, Historical restoration.

RESEARCH METHOD

Document analysis

Review of historical archives, laws and regulations, government reports as background information to analyse the cause and effects through four process: reading and organising, description, classifying and interpretation.

In-depth interviews

By interviewing Transitional Justice Commission members, we will formulate a roadmap of Taiwan's transitional justice in practice and implementation. We interview scholars and experts to examine projections through cross-dimensional comparison (Arend, 1971) and a variety of other perspectives.

BACKGROUND

What is Transitional Justice?

Transitional justice can generally be understood as "the conception of justice associated with periods of political change, characterised by legal responses to confront the wrongdoings of repressive predecessor regimes". The term "transitional justice" refers to formal attempts by postrepressive or postconflict societies to address past wrongdoing in their efforts to democratise. (Baek and Guti, 2015) Societies in transition have enacted a range of measures to

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confront legacies of violence, such as amnesty, criminal trials, truth commissions, and reparations (Murphy, 2016).

The International Center for Transitional Justice defines transitional justice as the ways countries emerging from periods of conflict and repression address large-scale or systematic human rights violations so numerous and so serious that the normal justice system is unable to provide an adequate response. Two well-known historical examples of such cases are the Nuremberg Trial and the South African Truth Commission.

Nuremberg Trial

The Nuremberg trials were a series of military tribunals held by the Allied forces under international law and the laws of war after World War II. The trials were most notable for the prosecution of prominent members of the political, military, judicial and economic leadership of Nazi Germany, who planned, carried out, or participated in the Holocaust and other war crime. The trials were held in the city of Nuremberg, Germany, and their decisions marked a turning point between classical and contemporary international law. It also took 10 months for the court to conduct the trial and read out the 250 pages of the court's judgments to individual sentences on September 30, 1946.

The trial itself is well-known as against human right violation in the warfare, and it's the most identical case of retributive justice approach for the sentences were convicted directly to the perpetrators, death or life-long prison.

South African Truth and Reconciliation Commission:

The Truth and Reconciliation Commission (TRC) was a court-like **restorative justice** body assembled in South Africa after the end of apartheid in 1996. Witnesses who were identified as victims of gross human rights violations were invited to give statements about their experiences when some were selected for public hearings. Perpetrators of violence could also give testimony and request amnesty from both civil and criminal prosecution. The TRC, the first of the 1,003 held internationally to hold public hearings, was widely seen as a crucial component of the transition to full and free democracy in South Africa. The approach of the TRC in South Africa contrasts with the approach of the Nuremberg trials (restorative justice versus retributive justice). The reconciliatory approach was a successful way of dealing with human-rights violations after political change, either from internal or external factors. Consequently, other countries have instituted similar commissions. The effectiveness and impact of the TRC was measured on a variety of levels:

- Its usefulness in terms of confirming what had happened during the apartheid regime ("bringing out the truth")
- The feelings of reconciliation that could be linked to the Commission
- The positive effects (both domestically and internationally) that the Commission brought about (i.e. in the political and the economic environment of South Africa).

Although transitional justice has been practiced since at least the time of the ancient Greeks and found form in the aftermath of WWII with the Nuremberg and Tokyo trials, the origins of the contemporary study and practice of transitional justice are most commonly associated with the "third wave" of democratic transitions from authoritarian rule in the 1980s in Latin America (Jeffery and Kim, 2017).

The importance of transitional justice became increasingly apparent in the 1990s, when the democratic transitions of countries Huntington (1991) designated as belonging to the "third wave" entered their final phase (Stolojan, 2017).

HOW DEMOCRACY RELATES TO TRANSITIONAL JUSTICE

Starting from the mid-1990s, the parameter of "transitional justice" within the scope of transitional justice began to expand into areas that had traditionally been demarcated in

scholarly terms as the concerns of conflict resolution and peace building; however, before giving definition to transitional justice, what caused the conflicts in the historical context is worth discovering.

According to Huntington's (1991) third wave of democratisation, the changing pattern of the states adopting democratic systems can be induced to five major factors:

Rising expectations linked to socio-economic development

 In pursuing the need for social and economic development, late President Chiang Ching-kuo proposed the Top 10 infrastructure projects that help to optimise the economy to meet civilian needs in Taiwan.

Deepening legitimacy problems of authoritarian regimes

The nationalist party Kuomintang (KMT) gradually replaced authoritarian rule with democratic systems due to the conflicts between government and people. The inner-party balance of power and leadership candidate selection methods have also changed the ideology since the Lee Teng-hui era" (Fell, 2015).

Shifting of religious positions

Changes in the policies of external actors

The Cross-Strait relationship within trilateral relations among China, the United States, and Taiwan. The severance of US-ROC diplomatic relation (1978) under the Carter administration versus US aid in the Taiwan Strait Crises under the Eisenhower and Clinton administrations (1958 and 1995).

Demonstration effect or snowballing

Factors 1, 2 and 4 were all present in Taiwan's path to democracy. They were also evident in the process of South Korea's democratisation. Is this coincidental or do similarities exist between the two countries? We will elaborate more evidences in the following discussion.

Democracy development in Taiwan and South Korea

The thesis focuses on the Republic of China (ROC) and Republic of Korea (ROK) as two comparable democratic states that follow the hypothesis of Huntington's "Third Wave of democracies" (1991). The cases of South Korea and Taiwan are considered relatively successful paradigms in the "Third Wave of democratisation."

During the process of democratisation, the idea of "participation" and "contestation" are two major concepts of common features presented in the form of democratic bargaining, elections, and low levels of violence. (Dahl, 1971) The role of the KMT during the period of authoritarian rule is crucial in the ideology of transition (Hao, 1996), Hao raises perspectives embracing Huntington's theory of democratisation and provide further insight to certain subsequent social movements in Taiwan.

Changing regimes: Steps to democracy?

Case of the ROC, Taiwan

"Under Martial Law the KMT's Leninist control and penetration of society was so extensive that there was almost no space for any kind of independent interest groups, to say nothing of a civil society should focus more on the relationship between opposition and the ruling KMT" (Fell, 2012). When nationalist party KMT retreated to Taiwan in 1945, it was the "quasi-Leninist control authoritarian regime" (also known as party-state) under Chiang Kai-shek's rule who later assigned his son Chiang Ching-kuo as successor. During Chiang Ching-kuo's presidency, the Kaohsiung Incident, Formosa Incident, and other events forced Chiang to lift martial law and further open to democratic reform in 1988 (the deadline). After Chiang Ching-

kuo passed away, the Acting President Lee Teng-hui turned to "soft authoritarian" and followed Chiang Ching-kuo's path to further legislate acts to promote freedom of speech, freedom of press and academic freedom. He later became the first president-elect in the ROC. In 2000, when the Democratic Progressive Party (DPP) opposition party candidate Chen Shui-bian won the Presidential election, a change in ruling party was accomplished, and Taiwan become a democratic regime.

Case of the ROK (South Korea)

After WWII and Japanese colonial era, the United Nations (UN) allied forces helped Yi Seung Man become the first President of the ROK. His presidency represented a stark shift from authoritarianism to democracy in 1988 after the June Movement in 1987.
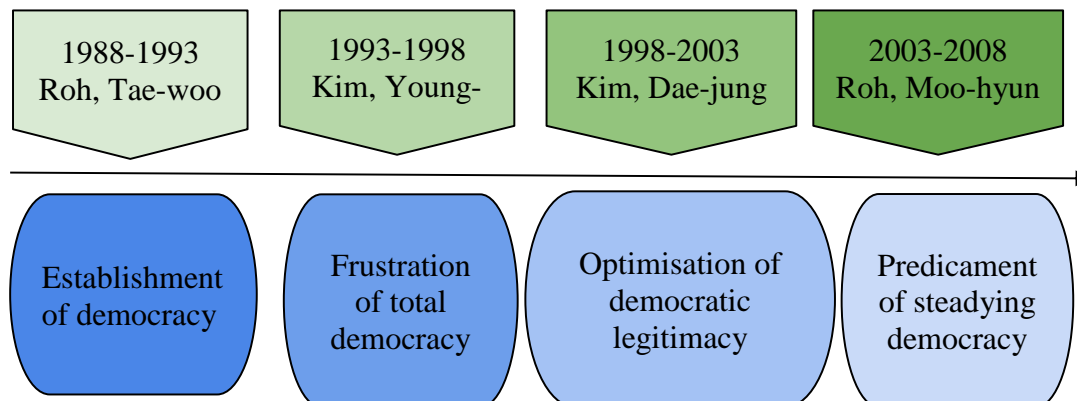
Figure 1. Timeline of South Korea Presidency under military-authoritarian regimes

1948-1960 Rhee, Syng-man	1963-1972 Park, Chung-hee	1972-1979 Park, Chung-hee	1980-1988 Chun, Doo-hwan
Dictatorship	Military-authoritarianism	Stronger military authoritarianism	Collapse of military-authoritarianism
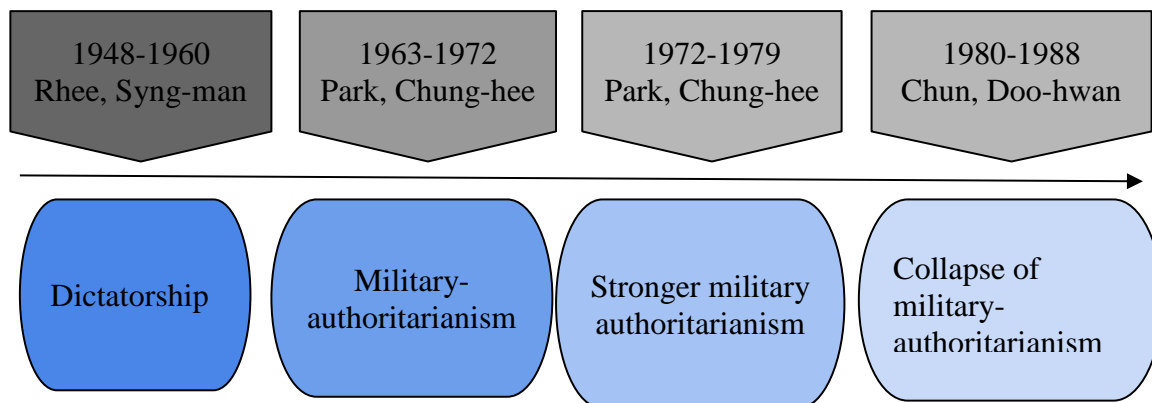
Figure 2. Timeline of South Korea Presidencies under democratizing regimes:

1988-1993 Roh, Tae-woo	1993-1998 Kim, Young-	1998-2003 Kim, Dae-jung	2003-2008 Roh, Moo-hyun
Establishment of democracy	Frustration of total democracy	Optimisation of democratic legitimacy	Predicament of steadying democracy

From the literature, we can identify three comparative phases in the process of democratisation between the two democracies:

Beginning Phase (before 1987)

South Korea and Taiwan started their processes of democratisation, respectively. in June 1987, with the *"629 Democracy Declaration"* (6・29 민주화 선언) and *"lifting of Martial Law"* (解嚴令) in July 1987. In this phase both countries encountered mass violence, illegal restriction of personal freedom, and torture, which are highly relevant to the topic of this study.

Democratic Transition Phase (1987~1992)

Democratic transition continued until transition until year of 1992 when Kim Young-Sam was elected 14th President of ROK and Legislative Yuan of ROC for the first time overall re-elected legislatures during the second phase.

Democratic Consolidation Phase (1993~2007)

During this phase, the two states attempted the more difficult task of enhancing the "quality of democracy" in political and societal contexts. It is commonly believed that compromise, elections and low levels of violence were the common feature of the third wave democratisation.

This study emphasises the first phase, when confrontation lies in political claims, struggling regimes, social incoherence, and the general concept of transitional justice under the historical context of injustice, violation of human rights, and mass violence that a society might encounter on the road from authoritarianism to democracy state might encounter the process of injustice, violation of human right and massive massacre. The researcher has collected elements of causes in South Korea and Taiwan for later discussion about transitional justice (See Table 1).

Table 1. Comparison of the ROK and ROC in historical perspectives

	ROC	ROK
Background	Accumulated dissatisfaction towards the authoritarian KMT regime, the corrupted bureaucracy, military order, the superiority of Mainlanders, restriction on language, inflation and poverty.	After the assassination of dictator Park Chung-Hee, Chun Doo-hwan instigated the 1212 rebellion and enacted the 517 Martial Law to stop the waves of democratic protests held by labour/students that embroiled the country.
First impact	The 228 Incident in 1947	The 517 Guangju Incident in 1980
Number of Victims[2]	18,000~28,000 (EY 228 report)	154 （518 Memorial Foundation）
Aftermath	Unidentified perpetrators and missing victims	Historical psychological trauma, less confidence in the government
Purpose	To right the injustices suffered by victims and heal society through democratic reform.	To restore the historical significance of the Gwangju Incident as a motivating symbol for change from authoritarianism to democracy.
Second impact	The White Terror Period of 1947, when the united-front policy limited freedom of speech, press and assembly. A quasi-authoritarian regime returned.	The June Movement in 1987. A nationwide civilian protest (joined by millions) rose up to demand democracy in South Korea.
Deadline[3]	Authoritarian leaders were forced to initiate/adopt democratisation processes in reaction to the public's demands within limited "deadlines."	
Commission	228 Incident Commission	518 Memorial Foundation

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[2] Spanish Civil War (1936-1939): Victim numbered 500,000.

[3] As aforementioned "the deadline".

International perspectives on transitional justice

The concept of "transitional justice" was first presented by Teitel in 1990 and became widely accepted in academic circles with the publication of the "*Transitional Justice: How Emerging Democracies Reckon with Former Regimes*" with a foreword by Nelson Mandela (Tietel, 1995). Yet the definition of transitional justice is still diverse.

In a narrow sense, transitional justice is a field of activity and question. The fields focus on how a society confronts past human rights violations, mass violence, and other forms of social trauma, including genocide, massacre and relics (e.g statues of dictators) to establish a more democratic, righteous or peaceful future. (Shelton, 2004); Elster believes that transitional justice occurs after a transition of political regimes, including adjudgment, purges, and restoration (Elster, 2004). The UN Security Council further stated that:

> *The full range of processes and mechanisms associated with a society's attempts to come to terms with a legacy of large-scale past abuses, in order to ensure accountability, serve justice and achieve reconciliation . . . may include both judicial and non-judicial mechanisms with differing levels of international involvement (or none at all) and individual prosecutions, reparations, truth-seeking, institutional reform, vetting and dismissals, or a combination thereof.* (United Nations Security Council, 2004)

From a wider sense, according to Barkan's definition, the intervention of international organizations will be identified in a wider sense of transitional justice cases (Burkan, 2000). Transitional justice should be considered as a process of normalisation in political reforms after a regime change. The process should involve not only democratisation, but also how the society can be rebuilt after an international war or civil war. International or civil conflicts that involve genocide or extinction seriously endanger human right. Therefore, the intervention of a third party (organisation) plays a role in transitional justice. Barkan's discourse and analysis may better explain why most countries and international organizations today are adopting this broad sense of transitional justice definition when initiating humanitarian aid, protecting peace movements, rebuilding nations, arresting war criminals, international judiciary prosecution, investigation and assignment of criminal responsibility.

International Approach

Most of the theoretical work and practices adopting this approach to transitional justices is under debate. Furthermore, every nation has its own dilemma when adopting this approach to advance transitional justice in its specific cultural, social, historical and other contexts. Jeffrey and Kim (2017) indicated that the major three approaches are:

(1) Prosecute versus Pardon: Also referred to as trial versus amnesty or justice versus peace;

(2) Retributive versus Restorative Justice, variants of which include "justice versus truth, perpetrator-focused versus victim-centered approaches, and backward-looking versus forward-looking approaches" (see as the above cases of Nuremberg trial and TRC)

(3) Bottom-up versus Top-down: Referring to state-led versus civil society-initiated approaches, or international versus local approaches

Within these approaches, countries adopt variance methods in implementing transitional justice. We looked at several cases that further manifest the types and logical trajectories of transitional justice policies around the world. (see as Table 2)

Table 2. Methods adopted in certain countries

Method	Country	Main purpose and solution
Tribunal	Central Africa	Tribunal to former King Jean-Bédel Bokassa
	Argentina	Tribunal to former President Jorge Rafaél Videla and high-ranking military officers
	Guatemala	Tribunal to former President José Efraín Ríos Montt
	South Korea	Tribunal to Gwangju Incident perpetrators and former Presidents Chun Doo-hwan, Roh Tae-woo
	Peru	Tribunal to former President Alberto Fujimori
	Chile	Tribunal to former President Augusto Pinochet Ugarte
	Egypt	Tribunal to former President Muhammad Mubarak
Reparation	Canada	Government's "Statement of Reconciliation" in apology to indigenous Canadian families for removing children and placing them in church-run Indian Residential Schools.
Property Confiscation	South Korea	Special Law on pending confiscation of the property of Japanese actors
	Germany	Party Law to confiscate former East Germany SED (Sozialistische Einheitspartei Deutschlands) party property
	Taiwan	Ill-gotten party asset settlement Commission
Truth Investigation	Peru	The Truth and Reconciliation Commission collected 17,000 oral narratives.
	Spain	The Historic Memory project officially condemning dictator Francisco Franco and providing reparations for victims.
	South Africa	Bishop Desmond Tutu promoted the "TRC" to uncover historical truths and promote national unity
	East Timor	Acceptance, Truth and Reconciliation Commission
Lustration	Czech Republic	Lustration Act for personnel settlement
	East German	Discharge of former judicial officers

Memorial	Israel	Museum Yad Vashem
	Taiwan	228 Memorial Day (Peace Memorial Day)
	South Korea	518 Memorial Foundation
Reputation Restoration and Relic Removal	Spain	De-Francoisation
	South Korea	De-Yi Seung Manisation
	Bulgaria and Mongolia	Removal of mausoleums
	Albania	Liquidation on dictator Enver Hoxha
	Taiwan	DPP government's "de-Chiangisation,", proposed removal of statues of Chiang Kai-shek and Chiang Ching-kuo
	USSR	De-Leninisation and de-Stalinisation, removal of statues

Objective and strategy of transitional justice policy

The primary objective of a transitional justice policy is to end the culture of impunity and establish the rule of law in a context of democratic governance. The legal and human rights protections in which transitional justice is rooted impute certain legal obligations on states undergoing transitions. It challenges such societies to strive for a society where respect for human rights is the core and accountability is routinely practiced as a primary goal. In the context of this goal, contemporary transitional justice aims on meeting certain objectives:

- Halting ongoing human rights abuses;
- Investigating past crimes;
- Identifying those responsible for human rights violations;
- Imposing sanctions on those responsible (where it can);
- Providing reparations to victims;
- Preventing future abuses;
- Reforming the security sector;
- Preserving and enhancing peace; and
- Fostering individual and national reconciliation.

In general, therefore, one can identify eight broad objectives that transitional justice aims to serve: establishing the truth, providing victims a public platform, holding perpetrators accountable, strengthening the rule of law, providing victims with compensation, effectuating institutional reform, promoting reconciliation, and promoting public deliberation. Each objective is an independent variable in societal development. However, there is also linear relation between respective objectives.

Current development of transitional justice in Taiwan

South Korea and Taiwan have followed a similar path to democracy in term of cause, regime type, societal response, and administrative strategy. Furthermore, both nations have adopted property confiscation, memorial, and reputation restoration as methods of seeking justice for historical events. Below, we look at the current development of transitional justice in Taiwan, beginning with an overview of political developments and democratisation:

(1) Party politics after 2008: Following Chen Shui-bian's DPP administration, the KMT retook the presidency after the election in 2008. During Ma Ying-jeou's administration from 2009 to 2016, the government is generally viewed as supporting the line of rapprochement with the People's Republic of China (ROC) with overly pro-China policies. The two sides of Taiwan Strait have signed 23 agreements and Taiwan became increasingly over-dependent on China's market. The pro-China policies raised public concern over whether the government was leaning too much towards the Chinese Communist Party. The DPP, as the opposition party, continued to blame the Ma administration for giving up Taiwan's sovereignty and not respecting public opinion.

(2) Social movement: Angered by over-dependence on China's market and the high unemployment rate in Taiwan, young people took to the streets to protest the government. The lack of transparency in the process of signing the cross-Strait agreements on trade in service and goods was a source of discontent. The rage of the younger generation culminated with the "Sunflower Movement" in 2014, when college students occupied the legislature and tried to block the passage of the Cross-Strait Trade in Service Agreement. The movement evolved into massive solidarity among the grassroots public. After rounds of negotiations with officials, the government promised to enact the Cross-Strait Supervisory Act mandating transparency and public participation in the decision-making process for all cross-Strait agreements.

(3) Impact: Ma's public opinion support fell to about 9.2% on the eve of the presidential election in 2016. Young people in Taiwan responded to China's witch-hunting tactics (e.g: Forbid Taiwanese pop singer to perform in China, force artists to publicly accept the "One China Principle", forbid any form of Taiwan independence claim) by voting for the opposition party DPP, winning the party most seats in the legislature and giving DPP candidate Tsai Ing-wen the presidency in 2016.

Since Tsai's election, Taiwan has had enough space to achieve its own transitional justice and social harmony. Taiwan's road map for transitional justice at the current phase has three major steps:

- The Ill-Gotten Party Assets Settlement Committee (Established in July 2016)
- The Transitional Justice Commission (Established in May 2018)
- Judicial Reform (TBD)

Implementation process

In the case of the victims of the 228 Incident, for example, there were multiple dimensions to the reparations for victims: (As figure 3).

Figure 3. Reparations for victims (228 incident case)
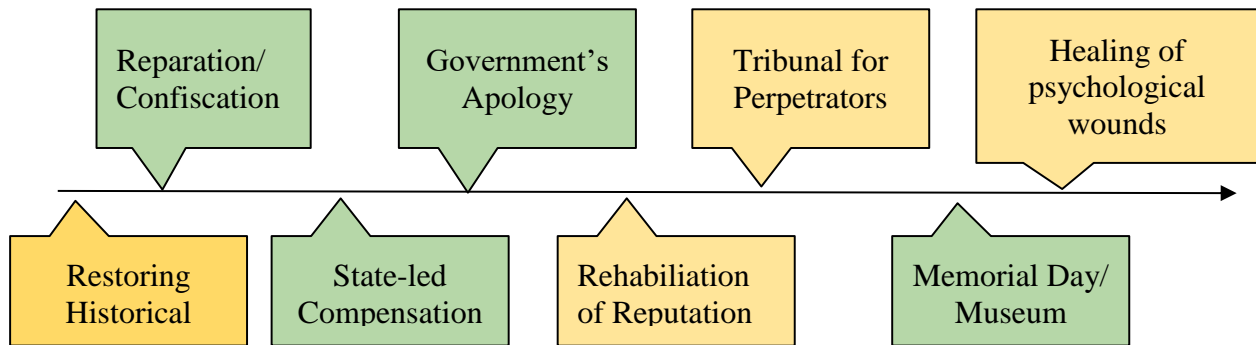
The victims in 228 Incidents waited long for justice as the perpetrators went unpunished. The decision on whether to adopt **tribunal** methods was affected both by access to the massive historical archives, as well as the unwillingness of the KMT leadership to cooperate. Moreover, due process would take years to clarify the facts of the crimes and achieve a final verdict. The above green parts are so far the progress of what previous government have completed and yet the yellow parts remain controversial.

The transitional justice works in ROK almost ended by the establishment of 518 Memorial Foundation when partial compensations and memorial events; however, the restoration of reputation or apology from the state still haven't taken place. Comparing with ROK's case, the 228 Incident has gone through more steps than 518 Incident in ROK but seemingly not enough for the society to discover the truth and further transfer historical truth to educational meanings.

CONCLUSION

The newly inaugurated Transitional Justice Commission newly released a report stating that the commission's work will be focus on the following four dimensions (Transitional Justice Commission, 2018):

- Restoration of historical truth
- Removal of authoritarian symbols and relics
- Rehabilitation of judicial illegal
- Confiscation of ill-gotten party property

According to the report, the mission of TJC will be put in the above narrow definition focused on restoration of reputation and removal of authoritarian symbols and relics to present true democracy rather than focusing on judiciary aspects. In that sense, the tribunal approach has little chance to be adopted. When the Transitional Justice Commission were established, and the major challenges will be the overall recheck and rebalance of government policy implementations. There are still difficulties in completing the yellow-colored parts, as well as the obstacles while promoting transitional justice.

The actions of the Transitional Justice Commission in Taiwan are notable in that the commission members represent a spectrum of backgrounds, from social activists, legal experts, experts of psychological healing, historians, and sociologists. The commission also has high expectations for accomplishing social reconciliation across the nation. The legal response of confronting the wrongdoings of repressive predecessor regimes is a challenging aspect of the work facing the Transitional Justice Commission. The commission also faces obstacles in accessing historical archives held by the former authoritarian party. This study offers a preliminary look at Taiwan's path to democracy and approaches to transitional justice.

Further discussion

(1) Will the change of party politics also alter the progress of transitional justice in Taiwan?
(2) Focus on settlement of victims, what about the settlement of perpetrators?

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INVESTIGATION ON THE ANTIBACTERIAL PROPERTY OF LEMONGRASS (CYMBOPOGAN CITRATUS) LEAVES AND CALAMANSI (CITRUS MICROCARPA) PEEL OIL ON METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS AND PSEUDOMONAS AERUGINOSA

JUBEELYNE F. GERNALE[1]

ABSTRACT

This study addresses one of the global public health threats, antibiotic resistance, using herbal therapies as an alternative treatment. Calamansi (*Citrus microcarpa)* peel oil (1.1% v/w) and lemongrass (*Cymbopogan citratus*) leaf essential oils (EOs) (0.8% v/w), extracted through hydro distillation dissolved in Mueller Hinton-Tween 80-dimethyl sulfoxide used against Pseudomonas aeruginosa and Methicillin-Resistant Staphylococcus aureus. The diameter of the zone of inhibition (ZOI), minimum inhibitory and bactericidal concentrations was determined. On the disc diffusion method, Lemongrass oil inhibits MRSA. Using transmission electron microscopy negative staining, lemongrass EO MRSA treated cells showed cell membrane shrinking potentiates oil to cause cell lysis. Antibacterial property is credited to oil's functional groups of citral-α, geranial, quercetin as qualitatively observed on ATR- FTIR analysis. MRSA is resistant to Calamansi peel EO. Pseudomonas aeruginosa was resistant to both lemongrass leaves and calamansi peel EOs.

Keywords: Antibacterial, Essential oil, Zone of inhibition, Lemon grass, Calamansi peel.

INTRODUCTION

Antibiotic resistance poses a serious global health problem. Increasing clinical reports on bacteria becoming resistant to few or multiple antibiotics requires urgent attention as treatment options are least available (World Health Organization, 2017). WHO classifies Methicillin-Resistant Staphylococcus aureus (MRSA) to priority number two of antibiotic-resistant organisms wherein urgency of need of new antibiotics is high. While a Carbapenem-resistant Pseudomonas aeruginosa ranks priority number one, a critical demand for new antibiotics. Knowing the serious worldwide concern, the traditional use of herbal medicine utilising extracts and essential oils to fight antibiotic resistance offers an alternative (Vadhana et al., 2015; Khan et al., 2009; Rojas et al., 2006).

Methicillin-resistant Staphylococcus aureus (MRSA) infection is a serious threat to public health where both community-acquired and health-care related infections are becoming prevalent (Swierzewski, 2015). Pseudomonas aeruginosa is an opportunistic pathogen with a number of virulence factors accounting for 5-15% of all nosocomial infections causing pneumonia and bacteremia (Mahon, Lehman and Manuselis, 2015). A significant isolate from burn wounds, eye infections (Lyczak, Cannon and Pier, 2000) that can cause life-threatening infections to the immunocompromised having ventilators and catheters where the organism usually thrives (Van Delden and Iglewski, 1998).

Over time, bacteria have developed resistance to antibiotics. There is a need to study new antibacterial agents especially bacteria that have developed or are intrinsically resistant to antimicrobials. The investigation of lemongrass leaves and calamansi peels antibacterial potential and property contributes to the knowledge to combat antibacterial resistance.

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THEORY

Essential oils (EOs), also called volatile oils or aromatic plant essences, are oily in consistency, volatile and fragrant (Bassolé and Juliani, 2012). EOs are lipid soluble, having densities lower than water and soluble in organic solvents (Chouhan, Sharma and Guleria, 2017). Typically, pale yellow to emerald green or from blue to dark brownish-red in color they can be variously liquid, solid or resinous at room temperature (Balz, 1999, cited in Bassolé and Juliani, 2012). EOs are extracted using various techniques namely solvent extraction, water or steam distillation, expression under pressure, supercritical fluid, subcritical water extractions (Bassolé and Juliani, 2012) and solvent-free microwave extraction (SFME) (Lucchesi, Chemat and Smadja, 2004). However, the use of chemical solvents alters the purity and fragrance of essential oils (Yap et al., 2014).

Most of the EOs are mixtures of hydrocarbons (Guenther, as cited by Koul et al., 2004) like terpenes, sesquiterpenes and oxygenated compounds like esters, ethers, aldehydes, ketones, lactones, phenols, and alcohols. These oxygenated compounds are more stable against oxidation and also responsible carriers for its odour (Koul et al., 2004). EOs composed of aldehydes or phenols having citral, cinnamaldehyde, carvacrol, eugenol or thymol as the major constituents showed the highest antibacterial activity. Ketones or esters such as β-myrcene, α-thujone or geranyl acetate had weaker activity (Bassolé and Juliani, 2012). Single EOs or combinations of artificial or purified main components have several antibacterial interactions and mechanisms. These interactions may cause either of indifferent, additive, antagonistic or synergistic antimicrobial efficacy (Bassolé and Juliani, 2012).

Cymbopogon citratus, also known as lemongrass, is a perennial herb growing about 1.5m high tall with an aromatic coarse grass (Asaolu, Oyeyemi and Olanlokun, 2009). Lemongrass has two different species, namely, Cymbopogon flexuosus and Cymbopogon citratus. Lemongrass leaves possess antidepressant, antioxidant, antiseptic, astringent, bactericidal, fungicidal, sedative and nervine properties (Gardner and McGuffin, 2013.) Lemongrass can inhibit gram positive and gram negative organisms, fungi and yeasts growth (Shah et al., 2011; Naik et al., 2010; Silva et al., 2008; Pereira et al., 2004; Inouye, Takizawa and Yamaguchi, 2001; Onawunmi, Yisak and Ogunlana, 1984).

Citrus microcarpa fruit has several common names such as calamansi, calamondin, kalamondin, limonsito or kalamunding, having an average diameter of 3.3 cm with a glossy green color to orange when ripe and thin, smooth rind (Yo and Lin, 2004). Oils and alcoholic extracts using different parts of this citrus plant are studied for their antibacterial potential (Rubiatul et al., 2015) and antiprotozoal activity (Mojica, Deocaris and Endriga, 2004). Both calamansi and lemongrass are widely cultivated in both the tropics and sub-tropics.

METHODS

Determination of methicillin resistance and antimicrobial susceptibility testing of test organisms

Pure cultures inoculated in Nutrient Agar slant of MRSA with BIOTECH Acc no. 10375 and Pseudomonas aeruginosa (Philippine National Collection of Microorganisms, PNCM Biotech No of 1335) purchased from the National Institute of Molecular Biology and Biotechnology (BIOTECH) were used as test organisms. Bacterial morphology was observed in Gram-stained smears using optical microscopy. Further, inoculation to selective media and biochemical tests were performed to establish organism's purity. Kirby Bauer Disc diffusion testing was performed to determine organism's susceptibility and resistance to antimicrobial agents. Subcultured MRSA in Blood Agar (Biomerieux) was incubated at $35 \pm 2^{\circ}C$ in ambient air for 24 hours. Pseudomonas aeruginosa streaked on MacConkey Agar (Biomerieux) was incubated at $35 \pm 2^{\circ}C$ in ambient air for 16-18 hours. Test organisms were maintained at a refrigerated temperature (2-$8^{\circ}C$) and subcultured once every week.

The gram-positive test organism, MRSA, had a ZOI measuring 18 mm using 30 ug cefoxitin disk and 8 mm using 1 ug oxacillin disk. There was an observed sharp edge using 10 units penicillin disk. MRSA was mec A – mediated oxacillin resistant and B-lactamase producer.

The gram-negative test organism, Pseudomonas aeruginosa, was susceptible to Meropenem, Piperacillin-tazobactam, Amikacin, Imipenem, Cefepime and an intermediate result with Ceftazidime. The organism was resistant to Trimethoprim-sulfamethoxazole, Ciprofloxacin, and Levofloxacin, respectively.

Plant materials, essential oil extraction and FTIR spectral analysis

Lemongrass leaves were harvested between 15:00 and 17:00 at Sitio Tower, Tugasan, Guadalupe, Cebu City. Calamansi fruits were purchased at a single store from a sole supplier in a local market in Cebu City. The plant species were positively identified at the Department of Agriculture - Region VII Office at Cebu, Philippines.

Both calamansi peels and lemongrass leaves were washed, air-dried for at least two weeks at ambient room temperature. Dried 1.5 kgs of lemongrass leaves cut in approximately three (3) inches long produced 12.0 ml essential oil for a percent yield of 0.8% (v/w). Lemongrass EO was clear yellow and lighter than water. Meanwhile, dried 3.0 kgs of calamansi peels produced 32.0 ml EO for a percent yield of 1.1 % (v/w). Calamansi essential oil was clear white and lighter than water.

Essential oil extraction employed hydro distillation using a Clevenger apparatus. Anhydrous sodium sulfate was added to the oil to remove traces of moisture. The plant EO extraction was performed at Department of Science and Technology – Industrial Technology Development Institute (DOST-ITDI), Chemicals and Energy Division (CED) at General Santos Ave., Taguig, Metro Manila.

Fourier Transform Infrared (FTIR) Spectroscopy employing Perkin Elmer Frontier in ATR mode equipment revealed functional groups isolated from hydro distilled EO. Spectra of the samples were obtained in the range of 600-4000 cm-1. Lemongrass EO had the prominent spectrum of amine stretch at 3384cm-1, alkyl C-H at 2917cm-1 and ketone/aldehyde C=O at 1721cm-1. Vibrations of C=C (cis and trans) as observed at the intense band at 1671cm-1 verified presence of conjugated double bonds (C=C-CHO) which were found in citral (Figure 1). In addition, the functional groups present on the calamansi peel essential oil were C-H (Alkene) and C-H (aromatic) at 3100-3000 cm-1 and 3150-3050 cm-1 and C=C at 1600-1680 cm-1 (Figure 2). The analysis was done at Philippine Nuclear Research Institute (PNRI) at Commonwealth Avenue Diliman, Quezon City, Metro Manila.

Agar diffusion susceptibility testing and determination of minimum inhibitory concentration (MIC) and minimum bactericidal concentration (MBC)

The unsupplemented Mueller Hinton Agar (MHA) was used for Pseudomonas aeruginosa while an MHA 2% NaCl was used for MRSA agar diffusion susceptibility testing. 50 ml of MHA was poured into the 150 mm dry and sterile pre-labeled petri dish. The plates were allowed to stand undisturbed to solidify at room temperature. Meanwhile, test inoculum was prepared following direct colony suspension wherein one to two isolated colonies from an 18- to 24-hour old plate was added to four (4) ml sterile saline solution. Optical densities using UV-VIS spectrophotometer were measured on the test inoculums (1 to 2×10^8 CFU/mL) to adjust with the McFarland standard. A sterile cotton swab moistened with the prepared one (1) ml of test inoculum was aseptically swabbed onto the solidified MHA plate by streaking the swab over the entire surface of the agar plate three times and rotating the plate approximately 60 degrees after each application to ensure an even inoculum distribution. The swabbed plates were allowed to stand for five (5) minutes.

The EO was dissolved in 10% aqueous dimethyl sulfoxide (DMSO) with Tween 80 (0.5% v/v for easy diffusion). Under aseptic conditions, empty sterilized discs (Whatman no 5, 6 mm diameter) were impregnated with 50 ul of essential oil-DMSO-Tween 80 mixture and placed on an agar surface (Prabuseenivasan, Jayakumar and Ignacimuthu, 2006). Paper disc moistened with 50 ul of sterile water (solvent used to obtain the EO) served as negative control. A standard disc containing 30 ug Linezolid (for MRSA) and 10 ug Meropenem (for Pseudomonas aeruginosa) were used as positive controls. The plates were left at room temperature for 30 mins to allow oil diffusion and were incubated 16-18 hours, $35 + 2^{\circ}C$, ambient air for Pseudomonas aeruginosa and 24 hours for MRSA. On each test organism, there were five (5) plates prepared to have one treatment group and control antibiotic disk on each plate. A vernier caliper was used to measure the diameter of the ZOI. The average of three independent measurements from licensed medical technologists was recorded and statistically analysed. There were five (5) plates in each experimental group namely (1) lemongrass EO and (2) calamansi peel EO. Each plate had one treatment group, one positive control antibiotic disk and negative control disks.

The lemongrass EO's MIC was determined using broth macrodilution method explained by Quinto and Santos (2005). One ml of cation-adjusted Mueller Hinton Broth with 2% NaCl (CAHMHB) was prepared for the test. 0.5% v/v Tween 80 with 10% DMS0 was incorporated in the CAHMHB to enhance oil solubility. Each tube was added with one (1) ml of bacterial suspension. Two-fold serial dilution of the EO was subsequently assayed and incubated 24 hours at $35^{\circ}C$. The CAHMHB-Tween 80-DMSO with lemongrass EO and MRSA mixture was yellow and turbid suspension upon preparation. Hence, turbidity in this method was not used to determine the presence or absence of bacterial growth. Accurately, each dilution tube was assayed spectrophotometrically to obtain pre- and post-incubation optical density at 625nm. The MIC was defined as the lowest concentration of the EO in a serial dilution sequence showing a decrease of absorbance from its pre-incubation absorbance as measured using Ultraviolet–visible spectrophotometry. The analyses were repeated thrice.

MBC was defined as the lowest concentration of EO to kill the test organism. The tube with the lowest EO concentration showing no bacterial growth (MIC tube) and three succeeding tubes showing a decrease of absorbance from its pre-incubation were selected for MBC testing. Pour plate was performed on all of these tubes. 0.01 ml of its contents were spread on melted nutrient agar, properly labelled, allowed to solidified and incubated for 24 hours at $35^{\circ}C$. Colony count was done on the plates. The EO concentration having one or no colony was reported as MBC.

Use of Negative Staining and visualization using Transmission Electron Microscope (TEM)

A sample broth-bacteria mixture was submitted for negative staining and examined using transmission electron microscope at SEAFDEC Aquaculture Dept., Tigbauan, Iloilo. This type of microscopy looked to the morphological changes of the test organism when exposed to the plant EO.

The approximately microbial growth of 10^6 CFU/ml was transferred, fixed with 2.5% buffered formaldehyde and securely sealed in a 15 ml polypropylene conical tube. The tube was centrifuged at 4,000 rpm for 15 minutes and washed with normal saline solution twice. Drop-cast (1 drop) onto formvar-coated carbon grids treated with poly-L-lysine and were allowed to stand for 10 minutes. The grids were washed with 0.45 nm-filtered distilled water and stained with 2% uranyl acetate for 20 seconds. The grids were washed with 0.45 nm-filtered distilled water and air dried. Finally, it was viewed using JEOL JEM 1010 Transmission Electron Microscope at 80KV accelerating voltage.

STATISTICAL ANALYSIS

Diameters of the ZOI results were expressed as mean with the standard deviation. Independent t-test was used to determine the significant difference of the ZOIs (mm) of MRSA and Pseudomonas aeruginosa between experimental and positive control treatment groups. Kolmogorov-Smirnov (KS) test revealed that ZOI (mm) data on calamansi, lemongrass essential oil and control group, Linezolid against MRSA were normally distributed as shown by D=.197,p=.200, and D=.197,p=.200 and D=.291,p=.191 and D=.300,p=.161, respectively. Similarly, ZOI reading on Pseudomonas aeruginosa control and treatment groups were also normally distributed. The variance of ZOI (mm) on MRSA data of the treatment groups were equal as showed by Levene's test. Data processing and analysis were done using IBM SPSS version 22.

FINDINGS

Lemongrass EO had a mean diameter of ZOI of 27.67 ±1.55 mm while calamansi peel EO had a mean diameter of 15.47 ±0.77 mm on MRSA. Linezolid, the control antibiotic, had mean ZOI of 31.67 ±0.67 mm on lemongrass leaves plate and 32.40 ±1.53 mm on calamansi peel plates respectively (Table 1). ZOI measurement of equal to or greater than 21 mm is interpreted as susceptible, while equal to or less than 20 mm is resistant (Cockerill, 2012). Thus, MRSA was susceptible to lemongrass EO while resistant to Calamansi peel EO. When testing Pseudomonas aeruginosa, lemongrass EO yielded an average diameter of ZOI of 7.40±0.43 mm while calamansi peel EO had no measurable diameter of inhibition. Meanwhile, Meropenem had the mean diameter of ZOI of 30.27±0.49 mm (Table 2). Susceptible meant a diameter of more than or equal to 19 mm (Cockerill, 2012). Both plants failed to show bacterial inhibition. Interestingly, lemongrass oil inhibits an antibiotic-resistant gram-positive bacteria but not to a gram-negative bacteria.

However, independent t-test revealed that the ZOI among Linezolid and lemongrass oil on MRSA were not the same at .05 level of significance, t (8)=5.314 and p<.05. Lemongrass essential oil (Mean = 27.67, SE = 0.69, 95% CI [25.67, 29.59]) treatment group had significantly smaller diameter of ZOI by 4.0 mm compared with Linezolid (Mean = 31.67, SE = 0.30, 95% CI [30.84, 32.49]) control group. In addition, the lemongrass had a significantly smaller diameter of ZOI by 22.87 mm compared with Meropenem (Mean = 30.27, SE = 0.22, 95% CI [29.65, 30.88]) control group when testing Pseudomonas aeruginosa. There is a significant difference of the ZOI between Meropenem and lemongrass oil group.

The minimum lemongrass EO concentration to inhibit MRSA growth is at 6,953 ug/ mL and at 55,625 ug/mL, is the minimum bactericidal concentration where the bacteria were killed. Data of pre and post-incubation optical densities shown in Table 3 and colony count is shown in Table 4.

In negative staining TEM, there was an equal distribution of clumps and dispersed couplets observed. Unaltered MRSA cell (Figure 3) showed normal morphology as regular, smooth surface and spherical in grape-like clusters. Most of the cells were intact. Cell membrane shrinking was evident by the pale staining area potentiates oil to cause cell lysis (Figure 4).

DISCUSSION

The application of essential oils in different fields such as medicine, pharmaceuticals, agriculture and environmental studies had made several positive impacts on the quality of life. The results of this study contributed to its potential antibacterial use.

In Agar Diffusion, although the diameter of the ZOI demonstrated by the lemongrass EO on MRSA is not as comparable to that of Linezolid, the measurable ZOI is evident that lemongrass has antibacterial potential. The susceptibility of MRSA to lemongrass oil was also reported by Warnke et al. (2013), Doran et al. (2009), and Chao et al. (2008). Alternatively, the lemongrass oil did not inhibit Pseudomonas aeruginosa growth. Several researches (Jafari et

al., 2012; Naik et al., 2010; Pereira et al., 2004; Torres et al., 1996) concluded similar results. Interestingly, lower concentrations of other plant EOs like clove, jambolan, pomegranate and thyme extracts combined with antibiotics inhibited Pseudomonas aeruginosa growth (Nascimento et al., 2000). Potentially, synergistic activity of EOs, for instance, using lemongrass oil coupled with antibiotics is another plausible direction to combat antimicrobial resistance.

Additionally, results of this study showing that the lemongrass oil inhibits more in relation to a gram-positive organism than gram-negative organism were supported by several studies (Naik et al., 2010; Chao et al., 2008; Cimanga et al., 2002; Onawunmi, Yisak and Ogunlana, 1984). Lemongrass depending on concentration and component amount tends to have several targets in a bacterial cell. A study by Aiemsaard et al. (2011) demonstrates that lemongrass oil citral and geraniol inhibits S. aureus biofilm formation and preformed biofilms. The qualitative presence of citral, geranial, and quercetin in this study or the action of oil, in general, suggested cell membrane shrinking as observed on a few ruptured cells using negative staining TEM. Similarly, studies of Adinarayana et al. (2012) and Marques et al. (2013) had observed that citral had both antibacterial and anti-fungal properties. However, a review by Yap et al. (2014) comprehensively said that the extent of EOs antibacterial effect could still be accounted to the high concentration comprised by the original oil rather than isolating and testing its major and minor components. Comparing one or two major oil components or the use of its collective components and understanding synergy with antibiotics to reverse resistance needs further scholarly work.

Results of Pseudomonas aeruginosa resistance to calamansi peel EO is in accord with the calamansi air dried leaves low activity to the organism (Ragasa, Sia and Rideout, 2006). However, methanol peel extract at 20mg/ml (Sekar et al., 2013) and the compound 2-Hydroxypropane-1,2,3-Tricarboxylic Acid isolated from *Citrus microcarpa* fruit extract using thin layer chromatography showed inhibitory activity to this gram-negative organism (Lee and Najiah, 2009). The method of extraction and plant part used may differ in terms of antibacterial efficacy.

Fundamentally, the hydrophobicity of the EO and its components allows them to permeate bacterial cell membrane lipids and mitochondria causing leakage of important molecules and ions and eventually leading to cell damage (Chouhan, Sharma and Guleria, 2017; Prabuseenivasan, Jayakumar and Ignacimuthu, 2006). Evaluating EOs antibacterial efficacy is challenged with its volatility, water insolubility, and complexity (Janssen, Scheffer and Svendsen, 1987). The use of encapsulated EO improves its bioavailability and efficacy especially to multidrug-resistant organisms (Chouhan, Sharma and Guleria, 2017). Result interpretation and comparison may also differ with the test methodologies variation such as microbial growth, bacterial exposure to oil, oil solubility, and use of emulsifier (Naik et al., 2010).

Table 1. Zone of Inhibition (mm) of Methicillin-Resistant *Staphylococcus aureus*

Group	n	Mean±SD
Lemon Grass[1]	5	27.67±1.55
Linezolid[1]	5	31.67±0.67
Calamansi[2]	5	15.47±0.77
Linezolid[2]	5	32.40±1.53

Table 2. Zone of Inhibition (mm) of *Pseudomonas aeruginosa*

Group	n	Mean±SD
Lemon Grass(1)	5	7.40±0.43
Meropenem(1)	5	30.27±0.49
Calamansi(2)	5	-
Meropenem(2)	5	30.27±0.60

Table 3. Lemongrass Essential Oil to MRSA Absorbance

TUBE NO	Dilution	Lemongrass EO Concentration (ug/mL)	PRE INCUBATION Absorbance	POST INCUBATION Absorbance
1	100	890,000	7.876	5.967
2	50	445,000	3.994	2.674
3	25	222,500	3.495	2.373
4	12.5	111,250	2.768	1.535
5	6.25	55,625	1.850	0.394
6	3.125	27,812.5	1.564	0.199
7	1.563	13,906.25	0.876	0.259
8	0.781	6,953.125	0.417	0.242
9	0.391	3,476.56	0.260	0.367
10	0.195	1,738.28	0.146	0.360

Table 4. Colony Count for MBC Determination

Tube no.	Dilution	Oil Concentration (ug/mL)	Colony count (CFU/mL)
5	6.25	55,625	0
6	3.125	27,812.5	8,007
7	1.563	13,906.25	9,378
8	0.781	6,953.125	9,567

Figure 1: Lemon grass Essential oil: FTIR graph
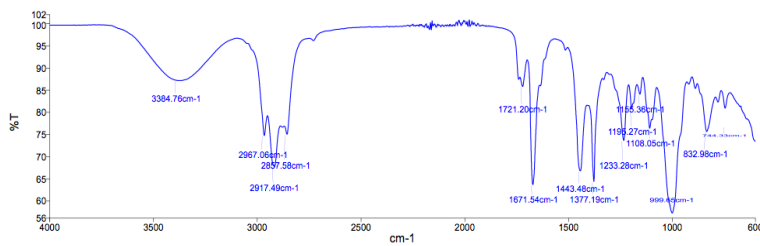
Figure 2: Calamansi peel essential Oil: FTIR Graph
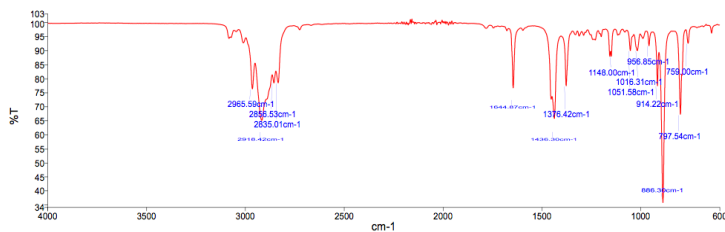
Figure 3: Unaltered MRSA
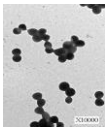
In Figure 3, the micrograph is showing unaltered MRSA cell with normal morphology as regular, smooth surface and spherical in grape-like clusters. There was an equal distribution of clumps and dispersed couplets observed. Most of the cell was intact.

Figure 4: Treated MRSA
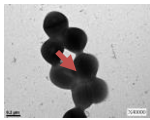
In Figure 4, the micrograph is showing treated MRSA with lemongrass EO with very few ruptured cells. Cell membrane shrinking (pointed on a red arrow) is evident by the pale staining area of the cells.

CONCLUSIONS

Antibacterial activity of plant EOs being compared standard antibiotics shows the potential of oil as an antibacterial agent. Lemongrass leaf EO possesses potential antibacterial property against MRSA but not against Pseudomonas aeruginosa. Moreover, Calamansi peel EO did not inhibit both Pseudomonas aeruginosa and MRSA growth.

IMPLICATIONS

The use of plants as an antimicrobial is well-studied subject matter. However, its use and understanding interactive mechanisms on antibiotic-resistant organisms are still limited. The results of this study may vary to other current and future works due to several aspects like oil solubility and components, oil emulsifier used, and factors differing between bacterial assays. Further studies like adding more advanced methods in oil extraction, including oil component quantitation, may arrive in better research outcomes benefitting public health.

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THE SOCIO-CULTURAL, ECONOMICAL AND SPATIAL IMPACT OF THE CORRIDORS OF FREEDOM IN ORLANDO, SOWETO

MS. LEAGO MADUMO[1]

This paper demonstrates the negative impact of the Corridors of Freedom in Soweto. While the City of Johannesburg (COJ) intended to use the corridor model as a mechanism to connect the city and the township, the paper argues that city failed to address the socio-cultural , economical and spatial impact of introducing a Bus Rapid Transit system (known as 'Rea Vaya '), in a township.

The failure of COJ's planning is demonstrated through a personal biographic account and through the works of : Robert Venturi and Denise Scott-Brown's book: Learning from Las Vegas, Anthony Vidler's:

The scenes of the street, Achille Mbembe and Sarah Nuttall's essays in the book: The illusive Metropolis, Lesley Bremner's essays on Johannesburg, essays by; Richard Tomlinson and Robert A. Beauregard, et al, in the book: Emerging Johannesburg, Perspectives on the Post-Apartheid City and theory of The Derive and other Situationsit writings.

The work is structured in 3 parts:1-the socio-cultural, economic and spatial dynamics of townships during the Apartheid regime;2- the spatial aftermath and the remedy of socio-cultural and economic activities in Post- Apartheid townships; 3-the overlays of Apartheid and Post-Apartheid planning.

Rea Vaya will be studied extensively as one of the many remedies that were employed by the City of Johannesburg to correct Apartheid planning. Concluding the study, the paper will demonstrate how the Corridors of Freedom, in the case of Soweto, are a continuation of Apartheid planning and thinking. The paper will further conclude with recommendations for new developments and the possibility of correcting the current state of the corridor.

Key words: periphery, corridor, Apartheid planning, Post-Apartheid planning, Johannesburg,Soweto,Township

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THE RELATIONSHIP BETWEEN THE MORBIDITY RATE AND HOUSEHOLD SOCIO- ECONOMICS CHARACTERISTICS

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The economic circumstance of a household may be linked to the varied situation a household may find itself in. Income is to a greater extent linked to the housing and food that a household is exposed to. Income among other socio-economic factors may also affect the demand structure of the household in terms of what the household may consider necessary or not. The level of household demand for health services and its preventive level may also be associated with other household factors including total household income, education level of the head of household,

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FLE
Learning

education level of the spouse, location of the household and the ability to buy certain goods and services. This paper analyses the relationship between the morbidity rate in a household and the household characteristics and the characteristics of the head of household. The paper uses data collected in the South African general household survey published in 2017 conducted by statistics South Africa. The study employs a multinomial logistic model with the level of morbidity rate categorised into high level, mild, and low. The apriori expectation is that households with low levels of income and low levels of education experience a higher morbidity rate. The contribution of the paper is therefore a proposal of preventive mitigation as opposed to treatment which tends to be more expensive on government. This paper is motivated by the initiative of the introduction of a national health Insurance (NHI) is South Africa.

Keywords: Socio-economic, morbidity rate; household; determinants

3-CJ08-1506

CAPITAL STRUCTURE, METHOD OF PAYMENT AND ACQUIRING FIRM PERFORMANCE: THE CASE OF CROSS BORDER ACQUISITIONS INTO AFRICA

PROF. CHIMWEMWE CHIPETA[3]

This paper seeks to investigate the influence of financial structure on the method of payment for developed and emerging economy firms acquiring African targets. Financial structure is dissected into capital structure and the degree of financial slacking. The study uses cross-sectional logistic regressions on the full sample first, followed by the developed economy acquirer sub-sample. Two key findings emerge from the study. Firstly, firms with low leverage have a higher propensity to use cash as a method of payment. Secondly, financial slacking positively predicts the use of cash as a method of payment. The study is unique in that financing choices are explored in an environment that is faced with more funding complexity.

4-CJ02-1520

POSITIVE AND NEGATIVE ANTECEDENTS OF CONSUMER ATTITUDE TOWARDS ONLINE SHOPPING

DR. EPHREM HABTEMICHAEL REDDA[4]

The internet has enabled businesses to make a wide-range of products available for consumers to shop online, conveniently, anytime from anywhere in the world. While online shopping has shown tremendous growth over the recent past, literature indicates that consumers do cite some serious risks in transacting through the internet, and show reluctance in engaging in such activities. Therefore, the purpose of this paper is to identify positive and negative antecedents of consumer attitudes towards online shopping in an emerging economy, South Africa. Primary data through a survey method was collected from a sample of 215 consumers in Gauteng, South Africa, in early 2018. The study utilised descriptive, correlation and multivariate regression analysis to achieve its stated objective. The study identifies convenience, better deals/competitive pricing, wider selection of products and online atmospherics as positive antecedents of consumer attitudes

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towards online shopping, while trust/reliability issues, financial risk, product risk, non-delivery risk and return policy issues are identified as negative antecedents of consumer attitudes towards online shopping. Online retailers are therefore encouraged to building on the positive antecedents by offering value for money (i.e. competitive pricing), offering a wide-range of goods and services in their web pages, providing valuable information to customers, and designing visually appealing websites. Similarly, online retailers should try as much as possible to reduce the real and/or perceived risks related to financial risk and product risk by building trust with their customers.

Keywords: online shopping, consumer attitudes, positive antecedents, negative antecedents

5-CJ16-1531

DOES OWNERSHIP BY BANKS AND NATIONAL INVESTMENT TRUST (NIT) AFFECT THE MARKET PERFORMANCE OF FIRMS IN FAMILY-DOMINATED CORPORATE SECTOR? EMPIRICAL EVIDENCE FROM SUGAR AND ALLIED INDUSTRY AND AUTO INDUSTRY OF PAKISTAN

DR. SHAHID ALI[5]

The main question addressed in this study is whether ownership by banks and NIT is likely to impact the market performance of firms in sugar and allied industry and auto industry of Pakistan. We find that ownership by NIT does not have a significant impact on Tobin's Q. The impact of banks on market performance Tobin's Q is significant but negative; however, this relationship is found only for firms in sugar and allied industry of Pakistan. The average percentage shareholding of institutional investors in our industrial sector is less than the required minority percentage. Banks are called as passive investors due to the potential business relation they have with the corporations they invest in. In Pakistan, banking industry dominates our debt market. The findings suggest that the external market perceives that the primary interest of banks stems from their relationship as corporate lenders over their interests as shareholders. Their major and foremost worry is to make certain that the principal and interest due on their loan is repaid.

Keywords: firm market performance, NIT, banks, insider ownership, market risk, firm-specific risk

6-CJ14-1730

TRANSFORMATIONS WITHIN THE INTERNATIONAL FINANCIAL SYSTEM AND THE GOVERNANCE GAP BETWEEN EMERGENT AND DEVELOPED ECONOMIES

PROF. JOSE EMILIO VASCONEZ CRUZ[6]

During the last ten years, the world has undergone intense and unexpected transformations within the International financial system. The impact of the 2008 world economic crisis dramatically changed the dynamics of transnational governance, swapping financial International Cooperation

configuration into an apparently, more democratic and equitable structure. Inevitably, the economic crisis reversed the conventional relation between free market and states, making way to necessary new structural economic governance with new actors and economic agents. The present research will prove how these changes affected the traditional financial system in two different ways: first, it critically deconstructed the out-dated assumption that market rational choices are above state decisions in economic international policy. Then, it will support the idea that the crisis radically advocated the necessity of new actors in the design of a new International Finance Cooperation architecture.

Both results will be detailed under a strict mixed methodology, based on the quantitative analysis of International participation within financial institutions, and a hermeneutical approach to determine legal reforms inside these organizations. Furthermore, I use the theoretical framework of Functionalism inside International Relations, to analyse how developing economies have become more interdependent worldwide, and how this condition has made inevitable to consider them as key actors in the new Financial global governance. I will deepen the cases of India, China, Russia, Brazil and Mexico.

Moreover, the research will analyse the "International finance governance gap" between developed and developing countries, and will emphasise on the initiatives generated by emerging economies inside two predominant financial institutions: the IMF and the G-20. While the G-20 is essentially an intergovernmental institution, which aims to develop International programs to materialize an efficient financial architecture, the IMF is an old and well know supranational organization created after the Bretton Woods conference at the end of the Second World War. The paper will demonstrate how both International finance Cooperation institutions have drastically changed their internal structure after the 2008 financial crisis. This has opened the possibility for the participation and decision-making processes for other states, principally, emerging economies. Additionally, I will reveal changes on the participation of developing economies concerning macro-prudential regulation, countercyclical economic policy, credit expansion, public endowment and International finance flows.

Finally, my investigation is intended to contribute on International political economy by providing a new lecture of the financial architecture structure, concluding that emerging economies have become more relevant in the configuration of the global financial governance system. I will empirically demonstrate how higher industrialized countries have lost power in the decision making process since the 2008 economic crisis.

7-CI24-1702

CHALLENGES OF THE IMPLEMENTATION OF PEACE EDUCATION IN JORDANIAN SCHOOLS

DR. DEEMA KHASAWNEH[7]

Education is one of the basic rights of humans. Students spend significant time of their lives in schools learning different subjects. Schools also play an important role in shaping students' attitudes, values and personalities. Unfortunately, some students in Jordan and other conflicted areas do not have access to quality education. Others dropout of schools due to poverty, violence or (cyber) bullying which means that they will miss their right of education. Depriving young people of education means that we will have people who feel unsecure and aggressive with low

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self- esteem. Students in Jordan suffer also (cyber)bullying which affects the safety of the learning environment as well as their academic performance. Peace education is essential for students' academic performance and achievement, self- esteem , confidence, and reducing the rate of violence and conflicts. Some challenges exist as obstacles for the implementation and fostering of peace education in Jordanian schools. They refer to curricula, teachers and violence. The aim of this study is to highlight the need to overcome the obstacles that are not conducive to peace education. It also suggests some strategies for the implementation of peace education in Jordanian schools. They include pre- service teacher education, in- service teacher education, curriculum instruction and the corporation of all social institutions.

Key words: peace education, violence, pre- service teacher education, in-service teacher education, (cyber)bullying

9-CI07-1660

DOES INCOME AND EDUCATION OF WOMEN TRANSFORM THEIR SOCIAL VALUES? A CASE STUDY OF WORKING-WOMEN IN LAHORE

MS. RIDA RIAZ[8]

Significant body of research indicates that economic prosperity promotes higher values like democracy, equality and freedom of choice, etc. Pakistan has witnessed a considerable increase in size of middle class contributing to increased participation of women in the labor force. This increase may translate into higher values among working women across income classes. This article draws on (n= 350) structured interviews with working women in the metropolis 'Lahore' to investigate the extent their socio-economic status is linked with self-expressive values. By using ordinal logit model, this study confirms that women with higher income and education are more independent in their choices. They exercise more authority in their personal and family life. Results also confirm their considerable interest in democratization process and diminishing involvement in religious practices.

10-CI19-1668

DEVELOPING LEADERS IN HIGHER EDUCATION: EVALUATION OF A LEADERSHIP DEVELOPMENT PROGRAM

DR. ASIA ZULFQAR[9]

Higher education has a short history in developing its academic leader. The latter authors even stress that a status quo is observed when it comes to leadership development in universities. The story is not different in both developed and developing countries. Leadership development has never been a burning issue in higher education. But due to the fast changes in HE policies across the world there is a call for trained leaders who can run the universities in an efficient way, who can foresee the future, who can help out their faculty in difficult times, and who can handle the external/internal pressures.This invoked the design, implementation, and evaluation of a

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[9]Dr. Asia Zulfqar, Assistant Professor, Bahauddin Zakariya University, Pakistan.

leadership development intervention involving academic leaders of Pakistan public universities. Goal of the intervention study was to raise awareness among university leaders in view of adopting transformational leadership (TL) in their academic practices.

An experimental research design was adopted to investigate the impact of a six-week leadership training and to analyze changes in six TL-leadership behaviors. Up to 37 deans and heads of departments from two public universities were involved. A semi structured interview protocol was developed based on the six transformational leadership behaviors to collect data before and after the intervention.

Three lower levels of revised version of Bloom's taxonomy (Remembering, Understanding, and Application) was used for data analysis. Content analysis of interview data, collected before and after the intervention, helped identifying indicators at different levels of awareness according to Bloom's taxonomy. Overall, in the present study we could report about the positive outcomes of a leadership intervention. Compared to a baseline, we observed clear changes in all six behaviors that reflect transformational leadership. Especially promising was the fact that we observe especially a strong change in the 'application' dimension of leaders' awareness.

This suggests leadership development should be considered as a stronger policy priority by the university management, but also by Higher Education authorities to foster the organizational development of universities in the context of reforms and innovations.

11-CI21-1704

PRE-SERVICE CHEMISTRY TEACHERS' MISCONCEPTIONS IN CHEMICAL EQUATIONS

DR. BUTSARI PHENGLENGDI[10]

This study aims to investigate pre-service chemistry teachers' misconceptions in writing chemical equations. Chemistry is a difficult subject to understand, in part because of its abstraction. Atomic or subatomic chemical reactions cannot be observed by the naked eye. Yet learners must still understand the associated chemical formulae or chemical equations. Perhaps not surprisingly, when we analyze Thai pre-service chemistry teachers' chemical equations, a variety of misconceptions were revealed.

Many chemistry learners, including pre-service chemistry teachers, struggle to write chemistry equations correctly. Thirteen Thai pre-service chemistry teachers were asked to write chemical equations in response to five questions. The questions required the name of substances as well as the complete chemical equations to include chemical formulae, balancing chemical equations and state of substances. A series of misconceptions were identified. 38.54 % of the tested pre-service chemistry teachers have misconceptions about the name of reaction products. For example, $CaCl_2$ was called calcium dichloride instead of calcium chloride. Misconceptions in the chemical formulae could, in turn, result in pre-service chemistry teachers also having misconceptions in balancing chemical equations. Indeed, when the calcium chloride formula was incorrectly written to be $CaCl$, predictably the pre-service teachers had difficulties with balancing chemical equations. More than one-third of the pre-service chemistry teachers also displayed misconceptions about the states of substances. For example, $H_2O(aq)$ was written as being in an aqueous state instead of a liquid state, and $CaO(l)$ was written as being a liquid state instead of a solid state.

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While the exact reasons for these results will require further independent study, some preliminary conclusions about the cause of these misconceptions may be ventured based on the author's observations: 1) Language based issues-- the learners may have misconceptions about reaction products' names because Thai learners may not be familiar with the English name of chemical substances, for example; 2) Level of abstraction--misconceptions about chemical formulae, balancing chemical equations, and states of substances are all at the symbolic level or in abstract areas where learners could not observe with their own eyes. The pre-service chemistry teacher test results might be of interest, and concern, to educators, colleges, and universities offering pre-service chemistry teacher curricula. For example, heightened consideration of language-based issues, as well as increased emphasis on linking the observable level with the microscopic level by using media, could lead to a deeper understanding about the symbolic level and associated chemistry concepts.

17-CJ12-1711

THE EFFECTS OF TERRORISM ON CHANGING THE COMPETITIVENESS INDEX VALUE: NORTH AFRICA CASE STUDY

MRS. NEAGU FLORENTINA-STEFANIA[11] AND DR. GABRIELA CECILIA STANCIULESCU

North African states have a higher economic potential than the other regions of Africa, as demonstrated by their position in the Global Competitiveness Index for 2017, ranking in the top 100 of the 137 countries surveyed. Following the 2011 events followed by the intensification of terrorist incidents in Egypt and Libya in the coming years, the economic, political and social situation has been affected.

The five states have common problems, which create difficulties for the business environment but also for the country's development, namely: government bureaucracy, political instability, corruption, inflation, poor infrastructure, tax regulations, increased crime rate, poorly educated workforce a poor public health system. These countries are major natural resource producers, Algeria is the first producer and exporter of oil and natural gas, the third largest natural gas supplier to the EU and the fourth largest energy product. Egypt is the leading regional producer of metals, chemicals, vehicles, pharmaceuticals, textiles and electronics, Libya is one of the world's largest oil and gas producers, and is also a member of OPEC, Morocco is one of the largest producers of agricultural fertilizers in particular diammonium phosphate, Tunisia is a phosphate fertilizer manufacturer and an exporter of processed petroleum products.

All the listed issues have created the ideal framework for maintaining political instability and escalating terrorist incidents, which affects all branches of the national economy. To see to what extent terrorism influences the 12 pillars of the Global Competitiveness Index, the JDemetra seasonal adjustment software was used for 2010-2017.

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[11]Mrs. Neagu Florentina-Stefania, Phd Student, Bucharest University of Economic Studies, Romania.

18-CJ11-1675

TO EXPLORE AN IMPACT OF DEMOGRAPHY, TRANSPORTATION, TECHNOLOGY, POLICY AND ROAD INFRASTRUCTURE ATTRIBUTES ON SERVICE QUALITY FACTORS AND THEIR IMPACT ON OVERALL SATISFACTION OF INTERCITY BUS TRANSPORT

MR. NAVEEN B RAMU ; AND ANJULA GURTOO[12]

Public transportation has become one of the cornerstones of a country's infrastructure development. In particular, road transportation plays a critical role in developing countries, as large numbers of people use bus transportation as the means to commute between one place to another for work, home, visiting friends, trips etc. According to KSRTC key statistics (2015), on an average, 26.90 lakh passengers travel in Karnataka every day. Ensuring the service quality in this service, therefore, is crucial. There are limited scientific studies, however, on the service quality of intercity passenger transport in India, especially with regard to infrastructure aspects.

In this paper we to explore an impact of demography, transportation, technology, policy and road infrastructure attributes on service quality factors and their impact on overall satisfaction of intercity bus transport. This study is based on primary data. A structured questionnaire captured passengers' perception on service quality of intercity bus passenger transport. Statistical techniques for data analysis involved multiple linear regression and hierarchical regression. Taking 26.90 lakh per day as the sample population, with 95% confidence level and 4% margin of error, the sample size for passenger questionnaire is 600.

Results demonstrate Distance travelled and more importantly the number of times the same intercity bus service used are important in determining the service quality dimensions and overall satisfaction of intercity bus transport. Further, Policy attributes demonstrate significant impact on the perception of service quality dimensions and overall satisfaction of intercity bus transport. Road infrastructure is essential aspect of intercity bus transport system. But road infrastructure is not that much important to passengers compared to policy aspects. Technology interface significantly impact the perception of service quality dimensions especially reliability, responsiveness and environmental factors. From our study it is evident that the service quality dimensions have greater contribution in influencing the overall satisfaction of passengers than road infrastructure and technology followed by policy. This study helps in identifying the service quality and allied parameters from the passenger perspective for intercity bus transportation. This helps the intercity transport organizations to devise a strategy for service quality for competitive edge.

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[12] Mr. Naveen B Ramu, Ph.D Student, Indian Institute of Science.

19-CJ09-1661

SELF-INTEREST OR INFORMATIONAL CONSIDERATION? A STUDY ON INDIVIDUAL TRADE ATTITUDES FORMATION IN THE U.S.-CHINA TRADE PROTECTIONISM DISPUTES

MR. HONGYAN WU[13]

Trade protectionism has become a long studied issue in international economics. Although it has become a common consensus among social scientists that lower trade barrier is beneficial to trading countries, recent international events have revealed that trade protectionism still has significant public support. Under the topic of public attitude towards free trade, most existing literature either follow the Heckscher-Ohlin model or the Ricardo-Viner model, that individual trade policy preference is primarily guided by how individual economic interests (income) is affected by open trade a certain country is engaged in. I argue one's trade policy preference is primarily guided by informational-based factors, because it is difficult for individuals, particularly lower-educated population, to link their income to the effect of trade policy. In this article, I delve into this question by studying the case of the current U.S.-China trade dispute: I collect data by interviewing a number of Chinese traders ranging from import-dominated sectors to export-orientated industries. Based on qualitative evidences, I found that Chinese traders are more likely to support trade protectionism if they read or watch more trade-nationalism news regardless of how their income or assets are influenced by trade protectionism. This article has strong implication for the study of international trade and international commerce.

20-CJ10-1682

PURSUING THE FANTASY: THE EFFECTS OF SENTIMENTAL CONNECTIONS ON LUXURY GOODS' CONSUMERS' DECISION-MAKING PROCESS

MS. YUXUAN DU[14]

Why do people choose to purchase luxury goods? This question has become a long-standing puzzle for social scientists and business researchers. Most existing literature focus on the economic drive for consumer decision-making, that consumers pursue luxury goods for their value-in-use as well as their symbolic value that could be shown to demonstrate the consumers' social status for vanity purposes. In this article, I study the case of Asian toy market. Using an original dataset consisting of survey data on the consumption of luxury toys in the Asian market from 2016 to 2018 as well as a number of qualitative interviews with Chinese toy producers, I find the primary motivation for luxury toy consumers is that the expectation to establish personal sentimental connection with the toys they purchase. I also find that, while the economic and business value of luxury toys do matter, consumers' decision-making process is primarily psychological driven. Combined, these findings strongly suggest that consumption on luxury goods is not merely a product of vanity concerns linked to the economic value of the goods or a product of the goods' value-in-use. I argue the personal sentimental link between the consumer and the luxury goods plays a key role. This

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[14]Ms. Yuxuan Du, Director, SP Association, Council Academic Association, China.

study has important implication to the study of consumer psychology and the economy of luxury goods.

21-CJ17-1751

AN EXAMINATION OF THE DICHOTOMY OF LEADERSHIP IN THE WORKPLACE

DR. NIALL HEGARTY[15]

This research explores the dichotomy of leadership in the workplace. Individuals are exposed to 'leaders' which can be either human or non-human. Workforce constraints, failures to replace key personnel, budgetary pressures, demands for immediate attention from customers and colleagues all compete to be the singular leader of individuals in the workplace. This article examines the available literature and seeks to clarify where the primary sources of leadership control exist which direct employee behavior. This is done within the context of leadership being anything or anyone that influences or directs an individual's behavior. The article also strives to identify the resultant major sources of stress for employees and proceeds to offer solutions which align leadership with organizational priorities.

22-CI13-1729

INCORPORATING A SOCIO-SCIENTIFIC ISSUE INTO THE SCIENCE CURRICULUM TO IMPROVE STUDENT ENGAGEMENT

MR. DHRUV NANDAKUMAR[16]

Chemistry is often avoided by the students who do not have to take it, and often intimidates students that do. It requires a concrete understanding of numerous concepts as well as the ability to conceptualize intricate processes at an atomic level, which may appear distant and inapplicable to many students. This study attempts to raise the student-perceived relevance of chemical education by introducing a lesson about the societal and ecological applications of chemistry into the college curriculum.

A focus was placed on the contextualization of chemistry in relevant and controversial socio-scientific issues (SSI) in an effort to develop student critical thinking skills by challenging them to discuss issues relating to scientific applications. Hydraulic Fracturing was selected as a suitable SSI for a general chemistry class because it is a politically and economically relevant topic that has arguments based on science and technology.

A lesson plan was developed and designed to stimulate self-directed learning by allowing students to contrast and defend different points of view on hydraulic fracturing. In Winter 2017, students were first given an extensive Prezi on Hydraulic Fracturing to provide a base knowledge on the issue. Upon arrival to their weekly discussion, the students were divided into groups of four, with each representing one of the following roles: Politician, Scientist, Environmentalist, or Oil Company Representative. Each of these roles was a perspective through which they would analyze the issue of hydraulic fracturing. Within these groups, the students discussed the numerous perspectives on Hydraulic Fracturing and the importance in considering all perspectives in order to better understand this socio-scientific issue and its relevance to the chemistry curriculum.

[15]Dr. Niall Hegarty, Associate professor, St. John's University, USA.
[16]Mr. Dhruv Nandakumar, Student, University of California Davis, United States.

Pre- and post-discussion quizzes were administered to students to gauge how much was learned from this activity. An additional survey was also administered after the activity to determine how students perceived the activity. The results indicate that most of the students who participated perceived the lesson plan as relevant and interesting. These results indicate that by contextualizing the chemistry curriculum through a socio-scientific issue, students were able to view the relevance of chemistry beyond the classroom environment.

24-CI03-1551

THE IMPACT OF INFORMATION COMMUNICATION TECHNOLOGIES (ICTS) ON TOURISM SMMES: A SOUTH AFRICAN CASE STUDY

MR. CORNELIUS TEMBI[17]

This research critically examines the contemporary impacts associated with the rise in ICT usage within tourism establishments, with specific reference to South Africa. Its builds upon the emerging research theme of analysis of such impacts from a developing economy perspective, owing to the increasing focus of tourism and its importance in development agenda's for such nations. Using a mixed method research paradigm, the study interviewed 200 businesses within the tourism value chain using a semi-structured survey. Additionally, in-depth interviews conducted with tourism organisation managers and destination planners, reveal that ICTs have assisted in boosting business competitiveness, service delivery, and organisational image. Furthermore, it has streamline operational processes while improving upon the skills of employees. The study makes a an important contribution in terms of informing ICT planning processes, while suggesting areas of policy

25-CI20-1633

THE CHALLENGES OF IMPLEMENTATION OF M-LEARNING IN HIGHER EDUCATION: ATTITUDE AND ACCEPTANCE

PROF. BOUCHRA LEBZAR[18]

The M-learning plays an increasingly important role in the development of teaching methods in higher education. However, the success of M-learning in higher education will depend on the acceptance of users of this technology.

The purpose of this article is to study the factors that impact the intentions of college and university students to accept M- learning. Based on the Unified Theory of Acceptance and Use of technology (UTAUT) [18], this research proposes a model to identifying the factors that influence the acceptance of M- learning in the Higher education of Morocco.

The UTAUT comprises four determinants of computer user behavior and four moderators who are judged to moderate the effect of the four determinants on the behavioral intent and behavior of the user. UTAUT believes that the perceived ease of use, perceived usefulness, social influences and facilitating conditions are direct determinants of the user's intent or behavior. This gives a significant improvement in the explanatory power of the model. Similarly, moderator

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[17]Mr. Cornelius Tembi, Student, Boston City Campus & Business College, South Africa.
[18]Prof. Bouchra Lebzar, Professor, Cadi Ayyad University, Morocco.

variables (gender, age, experience and context of use) are very important for understanding the characteristics of different users' groups.

A structural equation model was used to analyze the data collected from 193 students. The findings of this study indicate that factors such as the "ease of use" and the "quality of service" influence the intent to use M-learning while others like the "expected performance", the " personal Innovativeness" and the "influence of professors" have no impact on the intent of using M-learning.

26-CI15-1699

ADULTHOOD AND AWARNESS IN PEOPLE WITH INTELLECTUAL DISABILITIES: WORK EXPERIENCE AT THE SOCIAL BATEAU' CA MORO OF LIVORNO

DR. IRENE SALMASO[19]

Unilie project comes and built over time, starting with the family up to the educational institutions, for each child and teenager. As Luigi D'Alonzo claims, the educational action carried out by parents towards a child who becomes an adult must be an accompaniment, or both parents must have the ability to be close to their children, but at the same time must allow them to grow and become autonomous by moving away from the family.

Investing on the future planning together, parents and children, and at the same time establishing a relationship of "solidarity alliance" and "autonomous solidarity" are elements that can determine the success of a life project, as D'Alonzo defines as a paradox, " being together to separate ". [1]

The family is the fundamental element that allows children to achieve full autonomy, the awareness of this by the parents is the starting point for their children towards that situation of gradual detachment that allows the maturation and the approach towards 'adulthood. It is a slow and gradual process, often difficult by the parents, sometimes anxious, but that happens in adolescence because the children enter into conflict for generational reasons, to conquer their own time and space both mental and physical, so often forcing parents to leave them free to grow up.

It is thus necessary to set up educational projects that engage in the work that the family makes so that a level of autonomy is achieved that is appropriate to the expectations that can be set for a young adult with intellectual disability. These are the contexts within which those that at the beginning are potentials can develop and which can then become excellent projects

Lately it is believed that it is important to evaluate the subjective perceptions of the person with disability in order to evaluate his / her ability to perform well-defined roles , thus observing the components that revolve around the subject such as family members, teachers and educators. [2]

The social cooperative Parco del Mulino of Livorno, born in collaboration with the Italian Association of People Down section of Livorno on July 23, 2014 inaugurated the Social BateauCa'Moro where several down boys (some of them graduated from the Hotel Institute) are included in the cooperative of the type b Parco del Mulino cooperative .

It is a social restaurant , a place of cultural aggregation where customers in addition to take advantage of the restaurant service, can present events, books, exhibitions.

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[19]Dr. Irene Salmaso, Assistant Teacher, University of Florence, Italia.

[1] D'Alonzo L., "Issues of Challenges and Perspectives of Special Pedagogy", in D'Alonzo L., R. Caldin (ed.) , Issues, Challenges and Perspectives of Special Pedagogy. The commitment of the research community , Liguori, Naples, 212.

[2] 2 Boffo V., Falconi S., Zappaterrra T., For a job training. L and challenges of adult disability , University Press, Florence, 2012.

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