

Identification of Ideational Grammatical Metaphor in Saraiki Language and its Deployment in Different Registers of Saraiki and English: A Contrastive Study

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ABSTRACT

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This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors. Grammatical Metaphor refers to a set of lexico-grammatical choices offered by a language to create formality of expression and pithiness. Firstly, this linguistic feature was discussed by Halliday in 1985 who classified one of its types -the Ideational Grammatical Metaphor (IGM) into 13 types and regarded it as a scientific or academic discourse characteristic. The IGM phenomenon is now considered central in SFL (Systemic Functional Linguistics)inspired language teaching and significant for translators in understanding the Metafunctional meanings across SL (Source Language) or TL (Target Language). However, this worthwhile linguistic phenomenon has been understudied in the context of Pakistani languages. This work studies the Saraiki language for its identification and deployment in different English and Saraiki registers. The study follows the SFL Grammatical Metaphor Theory of Halliday (1998; 1999; 2006) as a theoretical framework and Content analysis as a tool for the identification and categorization of IGMs. The text consisted of the undergraduate course books of Saraiki and English, and its sample is delimited to 15 excerpts from both languages. The research results in the identification of all thirteen IGM categories in Saraiki, as in English; while regarding the IGM deployment in different registers of both languages, it is observed that the extent of IGM usage in Saraiki written text (1.14 per Clause) is greater than in English (0.83 per Clause), and academic text of both languages is found to have more instances of Ideational Grammatical Metaphors than the works of fiction in these languages. The study contributes to the body of research on Grammatical Metaphor and SFL-inspired comparative studies on Indo-Aryan languages of the world.

Keywords: Ideational Grammatical Metaphor, SFL, Saraiki, English, academic register, ELT, translation

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Introduction

This work analyses the Saraiki language to ascertain different categories of Grammatical Metaphor. GM is a feature of human languages that creates richness, brevity, and syntactic maturity in the text. The use of grammatical metaphors enhances a language user's ability to create formal expressions and suggest a plethora of choices in any linguistic context. Thompson (2014) suggests that GM has the potential to create meaning extension in any language, while Halliday and Matthiessen (2004) assert that the presence of GMs in the text is the sign of an "advanced level command" of the language user. Velázquez-Mendoza, (2015) in her study also affirms that the higher frequency of Grammatical Metaphors in a text correlates with the linguistic maturity of language-user. Grammatical metaphor usage is therefore considered a sign of linguistic competence (Xue-Feng, 2010).

GM was first highlighted by Halliday (1985, as mentioned in Yang, 2008; 2011; Devrim, 2015b; Xuan, & Chen, 2019) who regarded it as a device for creating the metaphorical variants of grammatical constructions, i.e. the nominalization of a verbal clause (Ideational Grammatical Metaphor) and alternate expressions of Modality and Mood (Interpersonal Grammatical Metaphors). Ideational GMs represent Field, and Interpersonal GMs reflect Tenor (Halliday & Matthiessen, 2014); hence, together they form two main sub-groups of grammatical metaphors (Taverniers, 2003; 2004; Memari, 2016; Saragih, 2017).

IGMs (formed by Nominalization) also contribute to the lexical density of the text, by creating a kind of "Packed grammar" (when speech-like clause-complex changes to either a lexically dense clause or a complex noun phrase, as explained by Farreira (2016) see, Fig.1, for example. This process happens specifically in a discourse that is scientific, academic, or formal (Thompson, 1996; as stated in To & Mahboob, 2018). Hence, the presence of the IGM feature in a language also implies that the text is lexically dense and semantically complex (Palumbo, 2008; Kaneso, 2016; Farreira, 2016; To & Mahboob, 2018). Studying the IGM feature is also significant for the translators in understanding the "Metafunctional modes of meaning" (Caffarel et al., 2004) across SL or TL. However, this worthwhile linguistic phenomenon has been understudied in the context of Pakistani languages. The present work, therefore, intends to study the Saraiki language to identify the types of Ideational Grammatical Metaphors (IGMs), i.e., 13 types in total, a concise introduction of which is as follows:

Types of Ideational Grammatical Metaphors

Ideational Grammatical Metaphor is mainly categorized into Experiential Grammatical Metaphors (Metaphors of Transitivity) and Logical Grammatical Metaphors (Derewianka, 2003; Devrim, 2015; Kaneso, 2016; Saragih, 2017; He & Yang, 2018). Experiential IGMs are formed by the Nominalization of processes (verbs) and adjectives, while Logical IGMs are formed either by Nominalization or

verbalization of the conjunctive elements (Martin, 1992, as cited in Devrim, 2015; Kaneso, 2016).

In total, thirteen types of IGMs have been identified in the English language until now, by the theorists of SFL. These categories have been discussed in Halliday (1998), Halliday & Matthiessen (1999), Halliday & Matthiessen (2004), and have also been studied by Yang, 2008; Hu, 2015; Devrim, 2015; Ferreira, 2016; Kaneso, 2016; Saragih et al., 2017, etc., in detail.

Fig. 1: Shows instances of "Packed grammar" because of IGM formation in the written register (adapted from, Ferreira, 2016, pg. 129)

	1	conjunc-		2 nd clause		•	
	noun phrase/ participant	verb/ process	adverb-prep phrase/ circumstance	tion/ logic	noun phrase: partcpt	verb/ process	noun phrase: participant
speech	The children	are growing	well	because	they	have received	medical treatment
	Children's growth	benefits	from medical treatment				
+	The benefits of medical treatment to children's						
writing	growth rate	New space to make meaning is opened up by grammatical packing					

The formation processes of IGMs:

The formation of IGMs, according to Halliday (1998) & Yang (2008), involves two types of grammatical movements, i.e., 'one in rank, and the other in the structural configuration'. The structural configuration takes place either by a morphological process or by lexical reformulation/substitution of a congruent form with its agnate form (which may belong to another grammatical class). The processes which take part in the IGM structural configuration, have been explained below:

Nominalization

In the process of Nominalization, nouns are formed from verbs, adverbs, adjectives, and conjunctions either through the morphological processes of derivation, for instance, 'development' from 'to develop'; or by converting the verbs into gerunds; or by agnation, for instance, 'work' or 'working' class from 'to work'; or by replacing a word with another lexical item, for instance, 'proximity' instead of "nearby". Biagi (1993, as mentioned in Juznic, 2012) explained that

Experiential IGM is a type of Grammatical Metaphor, which is the "reduction of the role of a verb in favor of the noun". So, Nominalization, after the 're-mapping between semantics and grammar' (in the words of Halliday & Matthiessen, 2004, Ryshina-Pankova, 2015 & Devrim, 2015) becomes a Grammatical Metaphor, when a Nominalized expression (explaining an entire situation as an entity) is realized through a phrase instead of a whole clause.

For instance, see the example given (by Martin & Rose, 2008. p.43, as cited in Shibata, 2013):

"We reached the precise results because we experimented carefully." "Our careful experimentation led to the precise results".

It's clear from the rephrased second sentence of the above example, which shows the change of a whole verbal expression (we experimented carefully) into a noun phrase (our careful experimentation) that this phenomenon has created a shorter expression. Such Nominalizations are mainly recognized as IGMs and are regarded as the metaphorical realizations of processes (verbs), qualities (adjectives), and logical relators (conjunctive elements, etc.).

Verbalization

Some IGM types are formed when a semantic shift takes place towards the 'Process'. Such as when the function of a 'Logical/Causal Relator' is performed by a process/verb (IGM Type-9), for instance, 'whereas' is replaced by 'contrasts with', or 'then' is substituted with 'follows' -Verbalization. Another similar possibility is when a 'Circumstance' (adverbial expression) is realized by a 'Process' (IGM Type-8), such as 'instead of' is substituted with 'replaces', or 'be about' with 'concerns' (Derewianka, 1995). Some SFL theorists refer to this type of semantic choice phenomenon where a semantic category is substituted with a verb, as 'Verbalization'.

Lexical reformulation

Sometimes, IGMs appear not because of a morphological process, but because they come into existence merely due to the replacement with the agnate forms. For instance, sometimes, 'because' is substituted with 'cause' or 'will/must' is replaced by 'necessary'. This process needs the re-alignment or lexical reformulation of almost all clausal elements.

Table 1: The categories of IGMs adapted from Halliday (1998), Halliday & Matthiessen (1999)

Types	Grammatical Class Shifts in the Formation of IGMs	Type of Semantic-Shift during the formation of IGMs
Туре-1		
	Adjective – Noun	Quality -Thing/Entity
Type-	Verb –Noun	Process - Thing/Entity
Type-3	Prep. Phrase - Noun	Circumstance - Thing/Entity
Type-	Conjunction - Noun	Relator - Thing/Entity
Type-5	Verb - Adjective	Process - Quality
Type-	Prep. P/Adverb - Adjective	Circumstance -Quality
Type-	Conjunction - Adjective	Logical Relator -Quality
Type-	Prep. Phrase – Verb	Circumstance- Process
Type-	Conjunction - Verb	Logical Relator -Process
Type- 10	Conj. /Prep. P -Adverb /Conjunctive adjunct	Logical Relator - Circumstance
Type-	+Noun	Empty Category - Entity
Type-	+Verb	Empty Category - Process
Type-	Expansion of Noun	Thing -Expansion of Thing as its quality

Table (1) displays the types of Ideational Grammatical Metaphors and the change

of grammatical classes during IGM formation and the semantic shifts, i.e.,

Suggested models for IGM formation

congruent-incongruent (metaphorical) forms.

On the formation process of IGMs (for GM theorization), two models have been observed in different studies by SFL scholars (as stated in Devrim, 2015), Stratal Model, when Grammatical Metaphor is formed due to the 'Stratal tension' between two language strata, i.e. Semantics and Lexico-grammar (Halliday & Martin, 1993, as mentioned in Devrim, 2015; Derewianka, 2003), and Semantic Model, which is an extension of the previous, states that IGM appears as a 'Semantic junction' between two semantic categories (Halliday & Matthiessen, 1999; Yang, 2008; Devrim, 2015). Most of the studies have based their identification and categorization of the GMs on either of these two models, while a few have also employed an integration of these models.

The deployment of IGMs in different language genres/registers

Ideational Grammatical Metaphor (IGM) is a sophisticated realization of wording a process as compared to a congruent one and usually is not a feature of our colloquial speech. Instead, it is typical of academic, political, scientific, historical, and legal texts. Halliday and Matthiessen (2004) regard IGM -as a dominant lexico-grammatical feature of academic and scientific text. The reason for this is the characteristics of "objectification and abstraction" (to show the existence of a process or quality as an abstract notion/thing) which are typical of these types of registers, and therefore, this "functional objective" is mainly achieved by using the linguistic construct of IGM (Kazemian, 2014., p. 212). Halliday and Matthiessen also explain that there is a significant variation among different genres of the same language for the frequencies of GMs and their types (as cited in Juznic, 2012). Hence, the quantitative investigation of the IGMs' presence in different genres across languages can be a measure of the linguistic development and formality of expression, which will shed light on understanding the nature of those registers and the differences/similarities of the languages on this basis.

The review of literature shows that many researchers have emphasized giving IGM awareness to second language teachers and learners and have suggested incorporating this linguistic device in English/foreign language instruction, academic writing, and heritage language teaching (Colombi, 2009; Baratta, 2010; Xue-Feng, 2010; Devrim, 2012; 2015b; Ryshina-pankova, 2010; 2015; Ortega, 2008; Ezeifeka, 2015; Velázquez-Mendoza, 2015; Kaneso, 2016; Ferreira, 2016; Nys, 2019; Liardét & Black, 2020; To et al., 2020). In many studies, the teaching-learning practice of IGM has been found an effective strategy to not only improve but also assess the linguistic competence of advanced-level students

(Zhang, 2018; Thomas & To, 2016; Liardet, 2013; 2015). Hence, it is a phenomenon worth studying, specifically in such a bilingual/multilingual academic context, where achieving English language competence is mandatory for the speakers of all indigenous languages; and where translation across the local languages and English, and curriculum designing using English as a medium of instruction are notable practices. However, in the Pakistani context, grammatical metaphor has been the least researched linguistic phenomenon, not only for our mainstream but also for our regional languages. Therefore, this study aims to explore a Pakistani indigenous language Saraiki to investigate the types of IGM, it has. Secondly, because the feature of Ideational Grammatical Metaphor is said to be predominantly present in the academic and scientific registers (Juznic, 2012; Ryshina-Pankova, 2015) and is not a feature of casual discourse, the present study uses Saraiki fiction and academic registers to provide evidence of IGM usage in this language.

Research questions

- 1. How many types of Ideational Grammatical Metaphors (IGMs) are present in the Saraiki language in comparison to English?
- 2. What is the ratio of IGM deployment in different Saraiki registers in contrast to the comparable English Registers?

Research methodology

For the identification and categorization of IGMs in the Saraiki language, and to check their deployment across different registers of both languages, this study has followed the SFL theory of Ideational Grammatical Metaphor developed by Halliday and his co-theorists (1998; 1999). Moreover, the studies of Hu (2015) and Ferreira (2016) have been benchmarked as criteria for IGM identification and their categorization (Table.1 and Fig. 2) in the Saraiki language. Having used Content Analysis as a tool, the research design employed in this study is descriptive-qualitative, along with some quantification. The important points considered during the analysis are as follows:

- > The study has considered those terminologies (for coding different patterns of IGMs) that have been previously used in the following studies: Yang, 2008; Devrim, 2015; Hu (2015); Ferreira, 2016; Saragih et. al, 2017, etc.
- The study was delimited to find the main 13 categories of IGMs only.
- Secondly, the IGMs' deployment in different registers of both languages has been calculated in percentage, using the formula:

Total Percentage in the text type =
$$\frac{No \text{ of } IGMs}{No \text{ of } words} \times 100$$

The Frequency of IGM instances per clause has been calculated using the formula: Frequency per clause = $\frac{No\ of\ IGM\ instances}{No\ of\ Clauses}$

Moreover, this theory-driven study is thorough, but manual analysis of clauses taken from the written text, and no corpus or software has been used for the identification of IGMs in the Saraiki language.

Data sample

The purposive sampling technique has been used in the study, and the language sample is the textbooks of Saraiki, being taught to under-graduates at Bahauddin Zakariya University, Multan, Pakistan, from which one thousand declarative clauses (from 15 excerpts) have been analyzed. Textbooks (digital and hard copies) have been selected as the study sample due to their containing the formal written register authored by acclaimed writers in the form of different genres, such as historical genre, travel memoirs, summaries of academic research, and pure fiction, etc. Secondly, the textbooks, in the words of Hyland (2009) "convey the values and ideologies of a particular academic culture" (as cited in Kaneso, 2016), and may represent more than one register of a language.

Fig. 2. Criteria of IGM identification (Hu, 2015). *Journal of World Languages*. pg. 55

Realization forms	Corresponding types	Corresponding lexicogrammatical expressions
Nominalization	1. quality →entity 2. process →entity 3. circumstances →entity 4. relator →entity 11. [zero] →entity	adjective → noun verb → noun preposition → noun conjunction → noun [zero] → noun
Adjectivization	5. process →quality 6. circumstance →quality 7. relator →quality 13. head → modifier	verb →adjective adverb/prep. phrase →adjective conjunction →adjective noun → adjective
Verbalization	8. circumstance →process 9. relator →process 12. [zero] →process	be/go + preposition →verb conjunction →verb [zero] →verb
Prepositionalization	 relator →circumstance 	Conjunction→ prep. /-al group

Figure (2) explains the grammatical processes that take place during the formation of different IGM types.

Analysis

This section discusses the identification of each IGM type in Saraiki and the deployment of these types in Saraiki and English, after analyzing the text (written excerpts) from both languages. The study has resulted in the identification of all main categories of Ideational Grammatical Metaphors in the Saraiki text. For explanation, examples of every IGM type have been given in both forms, the

congruent and incongruent/ metaphorical (alone as well as being used in

IGM Type-1 [Quality- Thing/Entity]

sentences)

IGM Type-1 is a de-adjectival nominalization, involving the process of morphological derivation in English. Such as, unstable – instability etc. This IGM seems to be frequently found in Saraiki, for example,

For more explanation, a few examples of grammatical metaphors (used in sentences) from the text have been written and analyzed here (changed to their congruent forms by the native speakers).

SRK	"" ــجیندی ېک خاص وجہ تال ایں تل وسیب دی تېذیبی ، جغرافیائی ، تاریخی
[Metaphorical]	سانجھ ہئی"" تے سب کنوں ودھ کر اہیں لسانی
/ Incongruent	(Chandio, 2011. p. 47)
	Jeendi hik khas vaja taan een Tal Wasseib di tahzeebi,
	jughrafiyaai, tareekhi tey sab kanu wadh kraeen lisaani
	sanjh haee
	of which reason was the cultural, geographical, historical,
	and more specifically, the linguistic unification in this
[Congruent]	region.
	۔۔جیندی خاص وجوہات تاں اے ہٹ جو ایں تل وسیب دی تہذیب سانجھی ہئی،
	ایندا جغرافیہ سانجھا ہئی، ایندی تاریخ تے سب کنوں ودھ کرائیں اتھاں دیاں
	زباناں سانجهیاں ہٹ۔
	Jeendi khas vajoohaat taan ey hun jo een Tal Wasseib di
	tehzeeb sanjhi hai, eenda jughrafiya sanjha hai, eendi
	tareekh tey sub kanu wadh kraeen ithan diyan zubaana
	sanjhiyan hun.

In the above example, the word <code>sanjh</code> سانجه (unification) is an IGM (type1) which is a nominal expression formed from an adjective سانجهی (<code>sanjhi/</code> unified)
and it's evident from the incongruent form that this IGM usage has created a kind
of condensed expression as compared to the congruent expression below.

As far as the deployment of this IGM in both languages is concerned, the calculation has shown that its frequency is higher in Saraiki as compared to English, i.e., 7.6% in Saraiki Academic text as compared to 3.2% in the English Academic text, and 4.6% in Saraiki fiction as compared to 2.8% in English Fiction. So, it can be inferred from these results that Saraiki Language makes more use of Type-1 IGM [Quality-Entity] in comparison with English.

IGM Type-2 [Process-Thing/Entity]

This IGM is a de-verbal nominalization, and its formation takes place either through the process of morphological derivation or lexical reformulation. For example, attract–attraction and exist-existence, etc. This IGM is largely present in Saraiki, for instance,

1 (1 0)	
	" ـ رَج روونٌ تے رَج خوش تھیونٌ وسیبی لوکاں دی فطرت دا خاصہ بن ا
[Metaphorical]	گئے "
	(Nasir, 2014)
	Raj rovan tey raj khush theevan Wasebi lokan di fitret da
	khassa bun gey
[Congruent]	Expressing extreme cheerfulness and extreme
	mournfulness have become the traits of the people of
	this region.
	اے خاصیت وسیبی لوکاں دی فطرت بٹ گئے جو رَج رُناً ونجے تے رَج
	خوش تھیا ونجے
	Ey khasiyat Wasseibi lokan di fitret bun gey, jo raj
	runna vanjey tey raj khush thia vanjey

In the above example, the expressions Raj rovan رَج روون (extreme mournfulness) and raj khush theevan رَج خوش تهيون (extreme cheerfulness) used in the sentences are things /entities (verbal nouns formed from two processes shown in the congruent forms - رَبّ رُناً ونجے تے رَج خوش تهيا ونجے) have created pithiness and a kind of formality in the written text, as opposed to completing a sentence made from three clauses.

Regarding the deployment of IGM Type-2 in the studied texts, it has been observed that the frequency of this IGM is much higher in Saraiki as compared to English, i.e., 20% in SRK (AT) as compared to 10.4% in ENG (AT) and 23.6% in SRK (F) as compared to 6.4% in ENG (F). Hence, it can be inferred from the results that the Saraiki language tends to make more Nominalized IGMs derived from Processes.

IGM Type-3 [Circumstance-Thing/Entity]

This type of IGM is the result of a semantic shift from a Prepositional phrase or an Adverb (Circumstance) to a noun (Thing/Entity) i.e., the 'downgradation of a single rank, from figure to element' (Ferreira, 2016, pg. 153), for example, instead of – replacement. The occurrence of this IGM is also there in the Saraiki text, for example,

[Metaphorical]	کہاٹی وچ انسان دے رو یاں تے اوندی حیاتی دے پچھوال تے اَجوال دے
	اثر دا فلسفیانہ ویورا کیتا ڳئے
	(Mughal & Gillani, 2017)
	Kahani vich insaan dey ravayyan tey oondi hayaati dey
	pichvaal tey ajvaal dey asar da falsfiyaana vevra keta gey
	This story has philosophically analyzed the impact of a
[Congruent]	person's past and present on his behaviours.
	انسان دے رو یا ں تے اوندے پچھو کڑ تے اجوکے ویلے داکیااثر تھیندے،
	ایں کہاٹی وچ ایندا فلسفیا نہ ویو را کیتا گئے
	Insaan dey ravayyan tey oondey pichvaal tey ajokey velay da
	kia asar theenday, een kahaani vich eenda falsfiyaana vevra
	keta gaey

In the above example, the IGM type-3 – ajvaal اَجِوال (present) formed from the congruent expression ajokey velay الجوكي ويلي (circumstance) along with another IGM (type -2) have created a kind of abstractness in the statement. Regarding the deployment of IGM Type-3 in the selected genres of both languages, it has been found that the extent of using this IGM is slightly lower in

Saraiki (Academic-Text) i.e., 1.4%, as compared to English (AT) i.e., 1.8 %, but slightly higher in Saraiki (Fiction) i.e., 3.4%, as compared to ENG (Fiction) i.e., 0.8 %.

IGM Type-4 [L/C Relator - Entity]

This type of IGM is formed when a Relator (conjunction) is replaced by its agnate form, i.e., by lexical reformulation into an Entity/ thing (noun). For example, in English, we have: 'so – result' or 'because – cause/ reason' etc. IGM type -4 has been found to be present in the Saraiki data, as well. for instance,

	نہ صرف پابندی ہئی بلکہ کئیں ہئی زبان دے استعمال دا جرم سزا دا سبب		
[Metaphorical/	وی بئی		
Incongruent]	(Rasoolpuri, 2019. p. 52)		
	Na sirf pabandi haee, blkey kaeen baee zaban dey istemaal		
	da jurm saza da sabab vi haee		
[Congruent]	Not only it was forbidden, but the crime of using another		
	language was also the cause of punishment.		
	نه صرف پابندی بئی بلکه جدّن کئیں بئی زبان استعمال کیتی ویندی بئی، تال		
	ایں جرم سانگہے سزا وی ملدی ہئی		
	Na sirf pabandi haee, blkey jaden kaee baee zaban		
	istemaal keeti vendi haee, taan een jurm saangey saza vi		
	mildi haee		

In the above example, the abstract noun *sabab* سبب (cause/reason) is functioning as IGM-4, after the replacement of two causal relators *taan* تال (in that case) & *saangey* سانگ (due to) in congruent form, hence creating a complex but condensed expression.

For the deployment of IGM Type-4 (L Relator-Thing) in different genres of Saraiki and English, it has been observed that the extent of using this IGM is slightly higher in Saraiki, i.e., 2.2% in SRK (AT) as compared to 1% in ENG (AT), and 1.8% in SRK (F) as compared to 0.6% in ENG (F).

IGM Type-5 [Process-Quality]

This IGM is the result of the grammatical process of morphological derivation when a Process (verb) changes to a Quality (adjectivization). Such as

'to prevent –preventive', 'to begin – initial' etc. in English. This category is also there in the Saraiki data, for example,

[Metaphorical]	""ایں طرحاں میڈی اُجڑی جھوک اَباد تھی ویسی "" (Mughal & Gillani, 2017. p. 23)
[Congruent]	Ein terhaan medi ujri jhok ebaad thi vesi In this way, my deserted abode will be inhabited/settled again. الي طرحان ميبّٰى جهوک جيهڙٰى اُجِّرُ ڳئى بئى،اوہ آباد تهى ويسى Ein terhaan medi jhok jehri ujjer gai haee, o'ebaad thi vesi

In the above example, the word *ujri* اُجِرُّی (deserted) is functioning as the IGM-5, a quality, replacing a whole process *ujjer gai haee* اُجَرُّ ڳئي ٻئي and, resulting in a condensed expression.

Regarding the deployment of IGM Type-5 [Process-Quality] in the Saraiki and English language genres under observation, it is clear from the stats that the English language makes greater use of this IGM in comparison to Saraiki. The percentage calculated after analyzing the texts is 7.2% in ENG (AT) and 2% in SRK (AT), while 11.4% in ENG (F) and 5.2% in SRK (F).

IGM Type-6 [Circumstance-Quality]

This IGM is either formed by morphological derivation or simply by using alternate agnate forms or by lexical reformulation of Circumstance (adverbial expressions or prep. p) into Quality (i.e., adjectivization). For example, 'possibly – possible' or 'in a similar way –consistent' etc. The instances of this IGM type were also found to be there in the Saraiki text, for example,

possibly – possible

in the end, lastly - last, final

In the above example, the word *haaliya* حاليہ (recent) IGM-6, functioning as a quality has been derived from a prepositional phrase *inhaan deenhan* اِ نَهاں جُنياں (circumstance) has created creating a condensed expression having greater abstractness.

After analyzing the targeted text for this IGM type, it has been found that the frequency of Type-6 is higher in the Saraiki Academic Register, as compared to the Saraiki Fiction, i.e., 7.2% in SRK (A) and 1.4% in SRK (F). While, its presence was higher in English Fiction, i.e., 7.8% than in Academic English, i.e., 3.4%.

IGM Type-7 [Logical/Causal Relator-Quality]

This IGM can be identified when the function of a logical/Causal Relator is performed by a quality (adjectivization). Such as 'then -subsequent' or 'so - resultant' etc. IGM type-7 is also present in Saraiki, for instance,

تېو ن- حاصل ڳا له دا وَ ت ـ سببی vlaa, vat – sababi tahu - hasil galh da then, so – rationally, logically therefore – resultant/resulting

انہاں کامیابیاں وچ نصیر دا کیا کمال ، جو تھئے رب سببی تھئے [Metaphorical]

(Khan -a native speaker)

Inhaan kamyaabiyan vich Naseer da kia kamal, jo thaey

	Rab sababbi thaey
	What's the contribution of Naseer? Whatever success
	he has earned, is due to God's mercy on him (Idiomatic
[Congruent]	translation).
	رَب دا کرم با تهوں نصیر کوں ا یہ کامیابیاں ملّن، نصیر دا اپنا کمال ایندے
	وچ کینی
	(Khan -a native speaker)
	Rab da karam ha tahoon Naseer koon ey kamyabiyan
	millen; Naseer da apna kamal eendey vich keini

In the above example, the function of a causal relator *-tahoon* نبوں (that's why) is being performed by a quality (i.e., IGM-7) – *sababbi* صببی (owing to) in the incongruent expression, hence, creating an abstract piece of text. This IGM-7 is a less commonly used type, and its extent of usage has been found very low in either of the languages. For instance, not a single instance of this IGM has been observed in the sample of English fiction, however, Saraiki fiction contained a few. The percentage of IGM Type-7 frequency in both languages is as follows: o.8% in ENG (A) and o.4% in SRK (A), while o% in ENG (F), and o.4% in SRK (F).

IGM Type-8 [Circumstance-Process]

When the function of a preposition is understood by a Process and a preposition or adverbial expression is substituted with an agnate verbal form the resulting expression is regarded as Type-8 IGM. For example, 'instead of – replaces', or 'in accordance with – accompanies' etc. (<u>Ferreira, 2016</u>, pg. 155). A few instances of this IGM type were also seen in the Saraiki data, e.g.,

دی بجائے۔جاہ گھِن گھدی اے	جیں کارن - جیند <i>ی وجہ</i> اے ہئی
di bajaey – jah ghin gidhi ey	Jain karan – jeendi vaja ey haee
instead of - replaces	for/because - due to it/ for the
	reason

	" سرکاری تے قومی زبان أردو مقامی زبانیں دی جاہ گھن گھدی"
[Metaphorical]	(Rasoolpuri, 2010. p. 51)
	Sarkaari tey quomi zaban Urdu maqami zubanain di
	jaah ghin gidhi
	The National and official language-Urdu took the
	place of regional languages.

[Congruent]	سرکاری تے قومی زبان أردو مقامی زبانیں دی بجائے استعمال
	تهيوڻ لڳي
	Sarkaari tey quomi zanan Urdu maqami zubanain di
	bjaey istemaal theevan laggi

In the above example, jaah ghin gidhi جاه گهن گهدی (took the place) -a process used in the place of a circumstance di bjaey دی بجائے (instead of) in the incongruent/metaphorical form is an example of IGM type-8; because a verbal phrase has replaced a Preposition (verbalization) to create an abstract condensed expression.

In Saraiki, it seems to be rarely used, and it has been observed that its frequency is higher in English Fiction as compared to the academic text of the English language, i.e., 3.6% in ENG (F) while 0.8% in ENG (AT), however, no significant difference has been observed between both genres of Saraiki, i.e., 0.6% in SRK (F) while 0.8% in SRK (AT). Secondly, English makes more use of this (Verbalized) IGM, as compared to Saraiki.

IGM Type-9 [Logical/Causal Relator-Process]

This IGM results when the function of a Logical/Causal Relator is performed by way of a process, by an agnate verbal form (Prepositionalization). Such as, 'so – leads to' 'whereas – contrasts with, etc. This type has also been identified in the Saraiki text under consideration, for instance,

	"ایں سکول وچ انگریزی دے سوا ہر زبان تے پابندی ہئی تے کئیں ہئی		
[Metaphorical]	زبان دا استعمال سزا دا سبب بندا با		
	(Rasoolpuri, 2010)		
	een School vich angrezi dey siwa her zubaan tey pabandi		
	haee, tey kaeen baee zuban da istemaal saza da sabab		
	banda ha		
	Except for English, every language was banned in that		
[Congruent]	school, and the use of any other language resulted in		
	the punishment.		
	ایں سکول وچ انگریزی دے سوا ہر زبان تے پابندی ہئی تے جیکر کوئی		

بئی زبان استعمال کریندا ، تاں اوں کوں سزا ملای بئی
een School vich angrezi dey siwa her zubaan tey pabandi
haee, tey jeker koi baee zuban da istemaal krenda, taan
oonkoo saza mildi haee

The IGM type-9 is a process sabab banda ha سبب بنّدا با (lead to / resulted in) doing the function of a causal relator jeker اتان (in case / thus) and creating a kind of abstractness and conciseness as a result, in comparison to the congruent mode, in the example above, where the sentence takes on two relators and three clauses for its completion.

Regarding its deployment in Saraiki and English text, it is seen from the analysis, that English has more tendency to use this IGM as compared to Saraiki, i.e., 1.0% in ENG (A) while 0.6% in SRK (A), and 1.7% in ENG (F) while 0.4% in SRK (F).

IGM Type-10 [Logical/Causal Relator-Circumstance]

This IGM appears as an 'information-rich adjunct' (Ferreira, 2016, pg. 155) resulting from a single-rank downgrade shift (i.e., from sequence to figure) and as lexical reformulation, a Logical/Causal relator (Conjunction) is substituted with Circumstance (Adjunct). For example: 'due to – under these conditions' or 'when – in times of etc. The instances of this IGM type have also been found in the data, for instance,

SRK	میڈی ضد سانگے میکوں سرائیکی ماحول آلے سکول بھیجا گئے						
[Metaphorical]	(Malik, 2013)						
	Medi zidd sangay meku Saraiki mahole aaley school						
	bheja gey						
	I was sent to a local school having Saraiki						
[Congruent]	environment, upon my constant demand.						
	ہیں کیتے میکوں سرائیکی ما حول آلے سکو ل بھیجاگئے						
	میں ضد کریندا ہم،						
	Mai zid krenda hum, heen kitey meku Saraiki mahole						

aaley school bheja gey

In the above example, medi zidd sangay مية صد سانگي (on account of/due to my doggedness) by adding circumstantial causal information (IGM type-10) has created a condensed expression as compared to the congruent one by replacing a causal relator -heen kitey ہیں کینے (therefore) and merging two clauses into one.

This IGM's frequency has been found higher in Saraiki text as compared to the English text, however, a difference has been observed regarding its deployment in the genres of both languages. English Fiction makes more use of IGM Type-10 as compared to Academic English, while its presence is higher in the Saraiki Academic Register as compared to the Saraiki Fiction. The percentage of IGM Type-10 deployment in both languages is 7.4% in SRK (A) and 6.0% in SRK (F), while 2.8% in ENG (A) and 5.4% in ENG (F).

IGM Type-11[Empty category -Entity]

This IGM is the construal of experience, and appears in the form of an abstract Entity, "without a necessary congruent precedent", in the words of Ferreira (2016, pg. 154); for example, the word 'phenomenon' (Ferreira, 2016. p. 152).

This IGM type have also been noticed in the Saraiki text, for instance,

تحقيق	عشق
Tehqeeq	Ishq
Research/investigation	Love

[Metaphorical]	""۔فقیر ایہ درس ٹہیندے، جو جیون کیتے دھن دولت دی ایڈی لوڑ نئیں				
	ېو ندى ""				
	(Mughal & Gillani, 2017. p. 16)				
	Faqeer ey ders daindey, jo jeeven kitey dhan dolet di edi				
	lore nai hondi				
[Metaphorical]	The mystic gives the lesson that money and wealth are				
	not very important for life/existence.				
	""شہنشاه ِ اعظم تخلئے وج بن ، ، عالم پناه دے جلال تے تنہائی مسلط				
	بئی""				
	(Dahir, 2017. p. 72)				
	Shehenshah –e-Azam takhliey vich hunnAalem panah				
	dey jalal tey tanhaii musallet haee				

The great emperor was in privacy, and solitude was dominating the splendour of His Majesty.

In the above examples, the words, <code>jeeven</code> جيون (life/existence), <code>takhliey</code> جين (privacy), <code>tanhaii</code> (solitude) -the IGMs type-II, are the existence of abstract entities, "without a necessary congruent precedent" in the Saraiki text. Regarding the deployment of Type-II IGM in the text of both languages, it is interesting to note that Saraiki tends to use more abstract nouns in comparison with English. Secondly, this IGM has been more frequently found in the Academic Register, either English or Saraiki, than in Fiction, i.e., 5.8% in SRK (F), 4.8% in ENG (F), while, 5.6% in SRK (A) and 6% in ENG (A).

IGM Type-12 [Empty category- Process]

Like Type-11 IGM, this type is also a construal of experience, "without a congruent experiential precedent" (Ferreira, 2016, pg. 154), and it appears in the form of an Existential process. For instance, appears, seems, and occurs etc. These kinds of constructions also exist in the Saraiki language as in English. For example,

نظر دے	ہو ندے	لگِّدے
nazarday	honday	lagday
(it) looks like	(it) happens	(It) seems

	"ابک بئے عالم کوپر دی تحقیق مطابق معلوم تھیندے جو سنسکرت اصل				
[Metaphorical]	منڈا توں اے لفظ گھدن""				
	(Rasoolpuri, 2010. p. 18)				
	Hik baey aalam Kooper di tehqeeq mutabiq ma'loom				
	theendey, jo Sanskrit asal Munda toon ey lafz gidhen				
	It seems from the research of another scholar -Cooper,				
[Metaphorical]	that Sanskrit has acquired these words from the original				
	Munda language.				
	""اتے ساکوں ایں جاپدے جیو یں اساں پندھیڑو دے نال نال ٹردے ودوں""				
	(Dahir, 2017. p. 71)				
	Atey saakoon een jaapday, jivein asan pandheru dey naa				
	naal turdey vadoon				
	and it appears to us as if we are walking alongside				

	the traveller
	the traveller.

In the above examples, it's clear that the verb phrases - ma'loom theendey معلوم تهيندے (It seems) and een jaapday ايں جاپدے (it appears) are not emerging due to a rank-shift though, but contain a semantic abstractness and therefore, come into the category of IGM, type-12, according to theory.

The analysis of Saraiki and English text for the extent of using Type-12 IGM has revealed that Academic text makes greater use of this IGM as compared to Fiction. Secondly, the Saraiki language seems to be a more frequent user of this IGM type, in comparison to the English language, i.e., 46.6% in SRK (AT) and 37% in SRK (F), while 38.8% in ENG (AT) and 30% in ENG (F).

IGM Type-13 [Expansion of Thing/Entity- Quality]

This IGM formation comprises a minor shift within the same rank, involving the construal of an Entity/Thing as the Quality of that Entity (Ferreira, 2016, pg. 154); the process is called adjectivization. This IGM has been found to appear in 3-4 subcategories in English and Saraiki almost similarly. However, due to differences in the orthographic traditions of both languages, their structures seem quite specific to either of the languages. In English, the expansion of Entity takes place by using an apostrophe, or by using 'of', or by using a dash '- 'between the elements, or by adding a suffix (morpheme); for example, Pakistan's destiny, moment of fulfilment, Communist-controlled, political decisions, etc. While in Saraiki, the expansion of Entity to Quality takes place by using diacritics (.´o), or the word (1 2), or by morphemes like 1 3 1 4 1 5 1 5 etc., which are specific to Saraiki and the related languages. This IGM has been frequently observed in the Saraiki text; a few examples are as follows:

تېذىب دامركز	ہتھو ں خالی	فنكارانه اظهار	ديوان ِ فريد
tehzeeb da markaz - Centre of	hathon khali empty-handed	fankarana Izhar	Dewan e Fareed
civilization	1 7	an artistic expression	Fareed's (poetic) Collection

See how the use of this IGM and its sub-types have been used in the sentences picked from the data:

[Metaphorical]	"سرائیکی دیاں پچکار آوازاں وی صحارن زبان کنوں سرائیکی وچ آئین"
	(Rasoolpuri, 2010.p. 50)

	Saraiki diyan puchkaar awazan vi Saharen Zuban kanu				
	Saraiki vich aaen				
	The Implosive consonant sounds of Saraiki have come				
[Congruent]	from the Language of Sahara.				
	سرائیکی دیاں پچکار آوازاں وی صحارا وچ بولی ونجنٌ والی زبان کنوں				
[Metaphorical]	سرائیکی و چ آئین				
	Saraiki diyan puchkar awazan vi Sahara vich boli vanjen				
	vali zaban kanu Saraiki vich aaen				
	"مصنّف لکھدے جو آگرہ دا ناں مہا بھارت دے رزمیہ وچ وی موجود اے				
	(Chandio, 2011.p. 46)				
[Congruent]	Musannaf likhdey, jo aagra da naa Maha-bharat dey				
[Congruent]	Rizmiya vich vi mojood ey				
	The author writes that the name 'Agra' is also present in				
[Metaphorical]	the heroic poem of Mahabharat.				
[wetaphorieur]	مصنّف لکھدے جو آگرہ دا ناں مہا بھارت وچ لکھی گِئی اک رزمیہ وچ وی				
	موجود ہے				
	Musannaf likhdey, jo aagra da naa Maha-bharat vich likhi				
	gaii ik Rizmiya vich vi mojood ey				
کثر محفلاں وچ مجلسی تنقید ستائش ِ باہمی تے غیبت ِ دیگراں					
	دا نمونہ بنؓ ویندی ہے"				
[Congruent]	(Iqbal, 2019. p. 234)				
[201-811010]	Eeen tarhan akser mehfilan vich majlisi tanqeed sataesh-e-				
	bahmi tay gheebat-e-deegran da namoona bun vendi ey				
[Metaphorical]	Similarly, the criticism in public meetings often becomes				
[the incident of mutual praise and belittlement of others.				
	ایں طرحاں اکثر محفلاں وچ مجلسی تنقید اپٹے لوکاں دی ستائش کرٹ تے				
	ڈو جھیاں دی غیبت کرٹ دا نمونہ بٹ ویندی ہے				
[Congruent]	Eeen tarhan akser mehfilan vich majlisi tanqeed apnay				
[201-811010]	lokan di sataesh karan tay doojhiyan di gheebat karan da				
	namoona bun vendi ey				
1	"اے اصل وچ صحرائے راجپوتانہ دا حصہ اے آتے تھر نال وی ونج رَ لدے"				

(Rasoolpuri, 2010.p. 13)

Ey asal vich Sehraey Rajpootana da hissa ey, atey Thar naal vi vanj raldey

In fact, it's a part of the Rajputana desert and makes a junction with Thar as well.

اے اصل وچ راجپوتانہ دے وچ موجود صحرا دا حصتہ اے اتے تھر نال وی ونج زلدے

Ey asal vich Rajpootana dey vich moujood Sehra da hissa ey, atey Thar naal vi vanj raldey

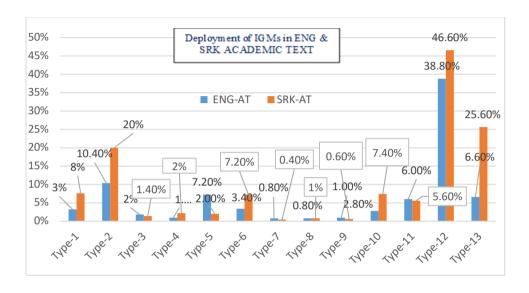
From the above examples of IGM Type-13 from the Saraiki data (صحارن etc.), it's clear that these IGMs (in which Entities have been expanded to Qualities) are formed either by a morphemic addition/change to the Entity, or by using diacritics -Izaafat, or by using a preposition (دا ، دے ، دی) creating a kind of relatedness for the expansion of Entity into Quality. Resultantly, a sense of abstraction and succinctness is created in the metaphorical expression as compared to the (un-packed) congruent one.

From the English data, examples of the four sub-categories of IGM Type-13 are given, i.e., by using an apostrophe (one's own circle), by a morphological change (Epicurean motto), by using a hyphen (Karachi-born), or using 'of after the Noun for expansion (Moment of fulfilment). It's apparent from the given IGM examples and their 'unpacking' that these IGMs not only convey a sense of abstraction but also add brevity and conciseness to the written language.

Regarding the deployment of Type-13 IGM in the text of both languages, it has been observed that Saraiki makes greater use of this IGM with a considerable difference, compared to English. Secondly, the Academic text of Saraiki seems to have more instances of this IGM as compared to Fiction, while the English Academic text was found with comparatively fewer instances of type-13 IGM as compared to English Fiction. The stats are 25.6% in SRK (A) and 13.4% in SRK (F), while 6.6% in ENG (F) and 8.0% in ENG (A).

The manual analysis of textual data (consisting of 10 excerpts taken from the textbooks, which make 2000 clauses in total) for the IGM deployment, has resulted as summarized in the table below. The following stats show the difference between both languages and among different genres, regarding the number of IGM instances. The overall occurrence of IGMs has been found a little greater in SRK than in ENG.

Bar graph: Displaying the percentage for the deployment of IGMs in Saraiki & English academic register



Bar graph: Displaying the percentage for the deployment of IGMs in Saraiki & English fiction

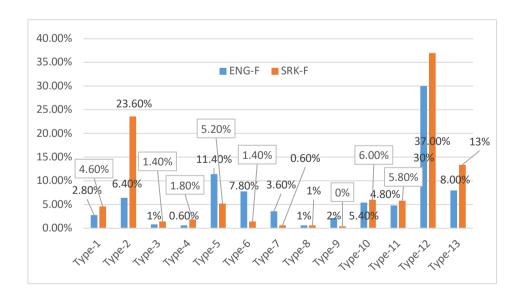


Table (3): The frequency of all IGM Types shown in the text types of both languages

Types IGM Categories		Academic		Fiction	
71	(Halliday &	Text			
	Matthiessen, 1999)	ENG			
			SRK	ENG	SRK
Туре-1	Quality -Thing/Entity	3.2 %	7.6 %	2.8 %	4.6 %
Type-2	Process -Thing/Entity	10.4 %	20 %	6.4 %	23.6 %
Туре-3	Circumstance –Entity	1.8 %	1.4 %	0.8 %	1.4 %
Type-4	L Relator -	1.0 %	2.2 %	0.6 %	1.8 %
	Thing/Entity				
Type-5	Process - Quality	7.2 %	2.0 %	11.4 %	5.2 %
Type-6	Circumstance –	3.4 %	7.2 %	7.8 %	1.4 %
	Quality				
Туре-7	Logical Relator -	o.8 %	0.4 %	o %	0.4 %
	Quality				
Type-8	Circumstance –	o.8 %	0.8 %	3.6 %	0.6 %
	Process				
Type-9	Logical Relator -	1.0 %	0.6 %	1.7 %	0.4 %
	Process				
Type-	L Relator -	2.8 %	7.4 %	5.4 %	6.o %
10	Circumstance				
Туре-11	Empty Category -	6.o %	5.6 %	4.8 %	5.8 %
	Entity				
Type-	Empty Category–	38.8%	46.6%	30 %	37 %
12	Process				
Type-	Thing -Expansion	6.6 %	25.6%	8.o %	13.4%
13	of Thing into				
Quality					
The Extent of overall IGM		Total Saraiki IGMs 1149			
usage		Total Saraiki Clauses: 1000 = 1.14 per			
in Saraiki Text		Clause			
The E	xtent of overall IGM	Total English IGMs: 833			
usage		Total English Clauses: 1000 = 0.83			
in English Text		per Clause			

The IGM frequency per clause in Saraiki has been found 1.14, and in English 0.83 per clause, which is greater in Saraiki fiction (13.4%) than in English fiction (8%), and greater in Saraiki Academic text (25.6%) than in English Academic text (6.6%).

Conclusion

The study has resulted in the identification of all IGM types in the written Saraiki language (which were previously recognized and discussed by SFL scholars in English and other languages). This result implies that Saraiki is a resourceful language, can manipulate grammatical constructions, and can create all those types of congruent and condensed expressions necessary to bring abstractness in writing.

It is also clear from the findings that Fiction contains comparatively fewer instances of most of the Ideational Grammatical Metaphor types in the data of both languages, which confirms the theory and previous studies (Halliday, 1998; Banks, 2003; Susinskienë, 2004; Hadidi & Faraahani, 2008; Fatonah, 2014; Kazemian et al., 2013; Kazemian & Hashemi, 2014; Hao, 2020) that Ideational Grammatical Metaphor is predominantly a feature of Scientific and Academic discourse and not of Fiction.

It has also been observed that the Saraiki language is inclined to make greater use of IGMs where Nominalization (of either Verb, Adjective, Adverbial, or L/C relator) takes place, or where Expansion of entity/noun takes place (i.e., Types-1, 2, 4, 13) as compared to English. Secondly, the tendency of using IGM Type-10 (where the L/C relator is used as a Circumstance/Conjunctive Adjunct) is also greater in Saraiki (in either of the registers) as compared to English.

These results have implications in the field of Educational Linguistics, as they may help in bringing more depth to the second/foreign language pedagogy for the native speakers of this indigenous language and may facilitate studying this feature in other related Indo-Aryan languages of the region.

The study results can also be of interest to people from the field of Translation Studies because successful translation between any two languages is determined by the correct understanding of IGM, (as postulated by Yang, 2008); moreover, correct IGM translation is also a yardstick to evaluate the quality of translation; since, for translators, it is often difficult to find alternate functional translation equivalents for Grammatical Metaphors in the Target Language (Izquierdo & Borillo, 2000; Palumbo, 2008; Juznic, 2012; 2015; Subiyanto, 2016). The findings of this study also contribute to the repository of research conducted on indigenous languages within the framework of Systemic Functional Linguistics.

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