Exploring Cohesive and Clause Complex Features in a Text from Deji Bryce Olukotun's *Nigerians in Space* (2014)

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Abstract: This paper aims to explore cohesive and clause complex features in a lengthy text from Deji Bryce Olukotun's Nigerians in Space (2014), a thriller novel. In other words, it seeks to unravel the salient linguistic features used by the writer to realize texture as well as logico-semantic organization in the text. Drawing on Systemic Functional Linguistics (hereafter SFL) in general and on works by Halliday and Hasan (1976), Halliday and Matthiessen (2004), Eggins (2004), Bloor and Bloor (2004), and Thompson (2014) in particular, a clause-by-clause and clause complex-by-clause complex analysis has been carried out in the text. The analysis reveals the dominance of such cohesive features as repetition, anaphoric reference, and conjunctive enhancement. It also exudes the predominance of relations of paratactic locution followed by hypotactic enhancement, and embedded hypotactic elaboration. All these features invariably mark the writer's literary idiosyncrasy.

Keywords: Cohesion, clause complex, thriller novel, SFL, text.

I. Introduction

The advent of Systemic Functional Linguistics (SFL henceforth) has redirected linguistics, which was viewed as a discipline with narrowly defined formal concerns, to a more comprehensive discipline in which the role of language in relation to the conceptualization and communication of meaning has been fruitfully investigated (Leech and Short, 1981:4). Since SFL is preoccupied with unearthing meanings in texts availed by language, texts are drawn from unlimited sources for this purpose. For instance, the sheer bulk of prose writing (one of the three genres of literature) is a source from which systemic linguists can draw textual materials— romance novel, historical novel, thriller novel, science fiction, etc.

As it clearly appears now, this paper aims to explore two SFL's systems—cohesion and clause complex—in a thriller novel, *Nigerians in Space*, by the Nigerian writer Deji Bryce Olukotun, with a view to pinpointing the cohesive and logical features which mark the writer's literary idiosyncrasy. Cohesion is a non-structural system since it links "elements that are structurally unrelated to one another" (Halliday and Hasan, 1976:27) to create a unified, coherent text. On the other hand, clause complex is a structural system whereby logical markers are used for its materialization (Eggins, 2004:256).

II. Theoretical Framework: The Systems of Cohesion and Clause Complex

As mentioned previously, this paper draws its theoretical constructs of cohesion and clause complex from SFL. SFL's core tenet is that any instance of language use carries three simultaneous meanings—interpersonal meaning, ideational meaning and textual meaning (Eggins, 2004:11-12). At the heart of the textual component lies cohesion (a subcategory) "which is the semantic relation between an element in the text and some other element that is crucial to the interpretation of it" (Halliday and Hasan, 1976:8). Specifically, Halliday and Hasan (1976:26) argue that cohesion does not concern what a text means; it concerns how the text is constructed as a semantic edifice. They also submit that there are five types of cohesion: reference, substitution, ellipsis, conjunction, and lexical cohesion. The first four types fall within the scope of grammatical cohesion. However, only reference, conjunction, and lexical cohesion are considered in this paper.

By definition, reference refers to how a writer or speaker introduces participants and keeps tract of them once they are in the text. Participants are the people, places and things that get talked about in the text (Eggins,

2004:33). Here again, endophoric reference, exophoric reference and homophoric reference are dealt with. The two subcategories of endophoric reference are anaphoric reference and cataphoric reference. While anaphoric reference occurs when the referent has appeared at an earlier point in the text, cataphoric reference occurs when the referent has not yet appeared, but will be provided subsequently. Unlike endophoric reference, exophoric reference is retrieved from the immediate context of situation. On the other hand, homophoric reference is retrieved from the shared context of culture.

As for conjunction, it refers to how the writer creates and expresses logical relationships between the parts of a text (Eggins, 2004:47). Arguably, conjunction adds to the texture of/in a text, helping to create the semantic unity that characterizes an unproblematic text. Halliday and Matthiessen (2004:538-549) recognize three main types of conjunctive relation: elaboration, extension and enhancement. Elaboration is a relationship of restatement or clarification by which one sentence is a re-saying or representation of a previous sentence. Unlike elaboration, extension is a relationship of either addition (one sentence adds to the meanings made in another) or variation (one sentence changes the meanings of another, by contrast or by qualification). However, enhancement refers to ways by which one sentence can develop on the meanings of another, in terms of dimensions such as time, comparison, cause, condition or concession.

Finally, lexical cohesion refers to how the writer or speaker uses lexical items (nouns, verbs, adjectives, adverbs) and event sequences (chains of clauses and sentences) to relate the text consistently to its area of focus or field (Eggins, 2004:42). The main kinds of lexical cohesion explored here are repetition, synonymy, co-hyponymy, co-meronymy and collocation. Repetition occurs when a lexical item is repeated. When two lexical items restate each other, they are said to be synonymous. And the difference between co-hyponymy and co-meronymy is that co-hyponymy occurs when two (or more) lexical items used in a text are both subordinate members of a superordinate while co-meronymy occurs when two lexical items are related by both being parts of a common whole. There are other instances of lexical cohesion which do not depend on any general semantic relationship of the types mentioned so far, but rather on a particular association between the items in question— a tendency to co-occur. This 'co-occurrence tendency' is known as collocation. (Halliday and Matthiessen, 2004:576-577). This relationship is known as expectancy relations as well.

As to where the entire clause complex system is located in SFL, it is obvious that it is located inside the ideational meaning, especially the logical component (Boor and Bloor, 2004:10), the first component being that of experiential. And clause complex can be defined as the grammatical and semantic unit formed when two or more clauses are linked together in certain systematic and meaningful ways (Eggins, 2004:255). There are two systems involved in the formation of clause complexes: the tactic system and logico-semantic system.

The tactic system is the system that describes the type of interdependency relationship between clauses linked into a clause complex. The two options in this tactic system are parataxis (where clauses are related as equal, independent entities) and hypotaxis (where clauses relate to a main clause through a dependency relationship). In other words, conventional grammars refer to parataxis and hypotaxis as 'co-ordination' versus 'sub-ordination' relationships (Eggins, 2004:259).

The logico-semantic system is the system that describes the specific type of meaning relationship between linked clauses. Again, there are two options: clauses may be related through projection (where one clause is quoted or reported by another) or through expansion (where one clause develops or extends on the meanings of another). Projection offers two choices: locution (where what is projected is speech) and idea (where what is projected is thoughts). And as regards expansion, it consists of three options: elaboration (relations of restatement or equivalence); extension (relations of addition); and enhancement (relations of development) (Eggins, 2004:259). Another system which contrasts with the tactic system is that of embedding. Actually, embedding or rank shift helps in packing more meaning into units, usually by packing a whole clause into a unit of a lower rank (Eggins, 2004:269).

III. Methodology

This paper seeks to explore the cohesive and clause complex features in a text drawn from Deji Bryce Olukotun's *Nigerians in Space* (2014). To that end, it splits the text into numbered clauses and clause complexes. It then applies the two theoretical constructs of cohesion and clause complex outlined in the previous section. As the analysis covers embedded clauses, some special notations (1.1,1.1.1,2.1.1,2.1.1, etc.) are needed. The key or notations used in the process of the identification of the cohesive and clause complex features are summarized in the table below.

Cohesion				
Types Key				
	AnapR: Anaphoric			
Reference	CataR: Cataphoric			

		ExoR: Exophoric	
		HoR: Homophoric	
		AdE: Addition	
	Extension(Ext)	VaE: Variation	
Conjunction		AdvE: Adversative	
	Enhancement	SpE: Spatio-temporal	
	(Enh)	CauE:Causal- conditional	
		MaE: Manner	
Lexical cohesion		RepE: Repetition	
		SynE: Synonymy	
		Co-hypo:Co-hyponymy	
		Co-mero:Co-meronymy	
		Coll: Collocation	

Clause complex types and notations/ key				
Logico-semantics		Taxis		Rank shift
		Parataxis	Hypotaxis	The notations are
	Elaboration	1=2	$\alpha+\beta/+\beta \alpha$	the same as the
Expansion	Extension	1+2	$\alpha = \beta / = \beta \alpha$	ones used for taxis
	Enhancement	1x2	αχβ/χβ α	and logico-
Projection	Locution	"1 2	α "β/"β α	semantics.
	Idea	'1 2	α'β/ 'β α	

<u>Table 1</u>: Key used for the identification of cohesion and clause complex features.

charade $started^{(RepE)/(SynE)}$ to feel pointless.] $^{CComplex29}\parallel\parallel^{75[\alpha]}$ [The $man^{(RepE)}$ at the $table^{(RepE)/(Co-hypo)}$ next to $table^{(RepE)/(Co-hypo)}$ next to $table^{(RepE)/(Co-hypo)}$

Exploring Cohesive And Clause Complex Features in a Text From Deit Bryce Olukotum's Nigerians see [124] 1947 [179] [what he [Anapha of the content of the complex of the co

didn't remember; Complext3|| 3000|| He_Complex | may have known | 3000|| He complex | 1000|| He complex | $[\underline{I}^{(AnapR)}]$ ve heard $[\underline{I}^{(RepE)}]$ of advances in this field, staining neurons with bioluminescence $[\underline{I}^{(RepE)}]$ $[\underline{I}^{(RepE)}]$ $[\underline{I}^{(RepE)}]$ $[\underline{I}^{(RepE)}]$ $[\underline{I}^{(RepE)}]$ $[\underline{I}^{(RepE)}]$ her (AnapR) groin (RepE) (Co-mero), the fluttering of a fan by the breeze (RepE).] 427 [The pressure of the wind moving (RepE) her (AnapR) along.] (Complex167) ["1]" 428 [There are cameras], 429[2] [Farai (RepE) muttered (SynE).] 430[1] [She (AnapR) guided Farai (RepE) s hand (RepE) (Co-mero) up her (AnapR) leg (RepE) (Co-mero), thrilled by the anonymity of it (AnapR), but also by the honesty of the darkness (RepE).] 431 [Neither of them (AnapR) had seen (RepE) the other's face (Co-mero).] 432 [This was just

touch (RepE).] 433 [She (AnapR) brought (RepE) her (AnapR) foot (RepE) (Co-mero) up to his (AnapR) groin (RepE) (Co-mero).] CComplex168 [1434[a] [There was more sensation (RepE) now, not just a breeze (RepE), but gusts], 435[-βa] [[surging quickly (RepE) (SynE) past her (AnapR), between her (AnapR) legs (RepE) (Co-mero)], 436[-βxβ] [[as if MaE) swaying around a sand dune (RepE).] (Ccomplex169) [1437[a] [Melissa (RepE) wanted (RepE)] 438[β] [[as if MaE) swaying around a sand dune (RepE).] (Complex169) [1437[a] [Melissa (RepE) wanted (RepE)] and leaves (Coll) of possibilities.] (All [Her (AnapR) father (RepE) could be alive (RepE).] [1431[She (AnapR) moved (RepE) her (AnapR).] (RepE) her (AnapR).] (RepE) her (AnapR) [1431[She (AnapR) father (RepE) her (AnapR).] (RepE) her (RepE) her (RepE) her (RepE) her (RepE) his (AnapR) father (RepE) her (RepE) her (RepE) his (AnapR) father (RepE) her (RepE) her (RepE) his (AnapR) father (RepE) his (AnapR) his (RepE) his (AnapR).] (RepE) his (RepE) his (AnapR) his (AnapR).] (RepE) his (AnapR) his (AnapR) his (AnapR).] (RepE) his (AnapR) his (Anap

Analysis of the Cohesive Features in the Text

The table below displays the cohesive features identified in the text.

Types of	Cohesive features	Frequency & %
Types of cohesion Reference	AnapR Melissa (1): she (3, 4, 18, 24, 47, 48, 72, 88, 96, 105, 1182, 275, 285, 310, 314, 348, 349, 353, 358, 362, 370, 4420, 421, 422.1, 424, 425.1, 430, 433, 443, 447, 452, 4463)— her (3, 19, 20, 47.1, 70, 146, 286, 306, 311, 348, 405, 413, 426, 430, 433, 435, 440, 443, 452, 453, 454(x2 (12, 93, 292, 320, 323, 363, 396)— hers (16, 275.2, 360, (22, 66, 87, 150, 267, 268, 269, 351, 387)— you (33, 58, 99, 101, 106, 108, 130.1, 147, 169, 175, 264, 319, 325, 334, 364, 366, 367, 376, 383, 384, 414)— her (45, 26, 347, 362.2, 427, 435, 441, 451(x2), 459)— herself (69, 340)— me (127, 172, 270)— my (270); man: Farai (10): 139(x2), 42, 57, 59, 92, 115, 118.1, 124, 154, 158, 159, 1184, 186, 187, 191, 192, 206, 207, 217, 220, 221, 223, 2236, 241.1, 242, 246, 247, 252, 255, 256, 257, 258, 2261.1, 262, 263, 273, 276, 281, 282, 295, 297, 299, 300, 318, 322, 328, 341, 342, 344, 356, 365, 372, 391, 406, 407, me (12, 98, 100, 114, 176, 195, 201, 215, 224, 227, 228, 242, 248, 250.1, 254, 293.1, 301, 302, 331)— he (17, 18, 104, 113, 129, 131, 146, 174, 266, 307, 308, 333, 348.1, 3374, 390, 405, 413)— his (18, 35, 47, 48, 105, 131, 152, 235, 275.2, 333, 360, 362.2, 405, 420, 433, 447, 448, 450, you (25, 142, 166, 244, 270, 287, 350)— my (39, 40, 49, 156, 158, 186, 202, 209, 218, 225, 242, 248, 249, 256, 2244, 298, 343, 406)— him (46, 126, 152, 275, 353, 422 (149, 287,)— myself (262, 334, 413); they (52): they (53); they (68)— them (69, 75, 161, 431, 465); man (75): he (77); groups (81): they (82); food (84): it (86); restaurs	45, 152, 417, 419, 660, 462, 1.1, 353,)— your 451)— I 8, 64, 98, 327, 335, 6.1, 286, 313, 457, I (11, 37, I75, 179, 230, 231, 59, 260, 303(x2), 7, 408)— 8.1, 232, 8, 45, 97, 855, 360, 2.1, 153, 9, 453)— 93, 119, 258, 277,)— your I (us (59): 76)— his ant (81):
	here (98, 267); rats (120): test (118): one (118); they (121 (121); rat (132): its (132); we (138): we (140); pain (1 (138.2); voice (153): its (153); Nigeria (156): they (157) (329); homeland (158): them (159); girl (163): her (165)	38.1): it ———————————————————————————————————

	CataR ExoR HoR	(168): him (16 198.1, 201, 213 (188): it (189)- 331)— they (3 researchers (22 (240); man: Te 308, 309); Ruth (354): the(358) (382); scientist itself (446); gla here (39): restant It (47.2, 185, (138); this (144 Melissa (1); R Nigeria (143); Tebogo (288);	02 (00.19) 13 (01.26) 12 (01.16)	
	Ext	AdE	and (4, 16, 38, 46, 50, 55, 71, 86, 138.2, 189, 204, 250, 253, 262, 302, 348.1.2)	16 (01.55)
		AdvE	but (52, 295, 310, 410, 425.1)	05 (00.52)
Conjuncti		VaE	or (5,238)	04 (00.42)
on	Enh	SpE	but when (18); and (29.2, 47.2, 80, 83, 316, 444, 448, 452, 453, 458); until (31); when (96, 135, 220); now when (132); since (300); then (360, 375); and then (413); while (454)	21 (02.04)
		CauE	but (2, 56, 74, 79, 122.2, 156, 190, 224, 228.2, 239, 321, 407); if (33, 59, 323, 325, 367); because (268, 337); so (273); whether (296); only that (307)	22 (02.13)
				02 (00.19)
Lexical cohesion	RepE	MaE as if (436); like (467) Melissa (1, 14, 30, 44, 67, 69, 85, 126, 167, 284, 347, 416, 437, 451, 457); remained (1, 30, 96); go (2, 22, 87, 143, 187, 241.1, 325); could find (3, 270, 362.1, 442); nervous (4, 36, 113, 361); causing (4, 6); seen (5, 169, 193, 208, 228.1, 372, 391, 431); heard (5, 29, 105, 152, 179, 260, 275, 299, 408); Ruth (8, 21, 27, 31, 315); asked (8, 70, 98, 302, 326); man (10, 75, 166, 186, 250.1, 251, 281, 288, 293, 348.1, 441, 459); said (10, 34, 67, 88, 91, 145, 163, 182, 237, 266, 295, 305, 355, 390); signal (11, 17); give (12, 89, 224, 331, 353); hand (12, 15, 20, 93, 146, 214, 330, 353, 360, 405, 413, 420, 454); Farai (15, 25, 29, 34, 51, 71, 89, 91, 234, 290, 305, 317, 348.1.2, 351, 423, 429, 430, 443, 456); large (15, 81); fingers (16, 19, 47); squeezed (17, 375); slide (19, 47.1); handglove (19, 354, 358); withdrew (20, 370); quickly (20, 435); later (22, 31, 38, 303, 314); drink (25, 83, 235); tea (27, 32, 152.1, 235); lovely (27, 389); sat (24, 29.2, 345); pulling out (29.1, 420, 448, 452); chair (29.1, 333); quiet (30, 96); returned (31, 155); voice (35, 106, 153); confident (36, 153); used to work (39, 219.1); sister (40, 49); blind (40, 162); sensed (44, 48, 349); was trying (45, 77, 195, 448); indulge (46, 126); could feel (47, 419, 425.1, 444, 447, 455); strangely (47, 198); touch(48, 8, 362.2, 423, 432, 450); lives (50, 190, 209, 343, 440); promise (48, 171, 183, 349); went on (51, 181); haven't changed (52, 54, 80, 188, 258); move (55, 157, 427, 443, 446, 458); hope (57, 259); surprise dish (60, 64); surprise (62, 228, 362); hungry (66, 85); couple (69, 161); date (69, 77, 165); father (70, 270, 286, 292, 306, 311, 311, 323, 348.1.1, 440); words (71, 78); wanted (72, 99, 108, 130.1, 142, 154, 192, 198.1, 198.2, 201, 207, 253, 417, 421, 437); table (75, 275.1, 315); started (74, 278, 370); was claiming (75, 178); spoke		551 (53.44)

	84); came (84, 244); wait (90, 317, 371); shouldn't have done (92, 238, 324.1); meet (100, 287, 297); reporter(101, 106); darkness (105, 345, 419, 430); researchers (107, 156, 228); know (109, 147, 166, 221, 229, 230, 236, 263, 308, 335, 348.1.1, 407); tail flick (109, 111, 117, 121, 222.1, 127, 132, 135); think (116, 262, 269, 286, 291, 331, 337, 339, 341, 348, 350); test (118, 136); developed	
	(118.1, 176, 280); assess (118.2, 138); pain (118.2, 121, 134, 136, 138.1, 350, 367); rats (120, 132, 134); tails (121, 132, 135); in response (121, 266.1.1); measure (122.1, 136); answer (123, 342); 've isolated (124, 140); gene (124, 136); decided (126, 284); tell (127, 191, 206, 248, 356, 365, 422); cleared (131, 316); exact (133, 138); years (138, 176, 187, 241.1); stop (135, 138.2, 234, 457);	
	psychological (140, 368); Nigeria (143, 150, 156, 184.1, 186, 195, 208, 287, 302, 325); study (144, 418); released (146, 458, 459, 460, 463); surname (149, 166, 225, 288); lost (153, 416); capacity (156, 340); deaf (162, 164); Bello (166, 168, 176, 177, 198, 212, 215, 224, 226, 229, 237, 260, 278, 293, 324.1, 326); contents of (176, 301); biotech sector (176, 380); Proin Gein (185, 201); biotech sector (176, 280); Proin Gein (185, 201); biotech sector (176, 280); Proin Gein (185, 280); Proin Gein (18	
	contacted(176, 301); biotech sector (176, 280); Brain Gain(185, 203); called (185, 303); afraid (186, 268, 416); home (187, 244, 298); country (188, 217); certainly (189, 295, 368); scam (195, 196, 210, 211, 240, 278, 311,321, 336, 340); money (196,198.1, 331); commitment (198.2, 199); lab (202, 406, 418); would help (203, 270, 441); trip (209, 287); convinced (215, 313); would	
	arrange (216, 294); research facilities (217, 406); plane ticket (219, 309); cash (223, 279); good (228.2, 366); scientists (228.2, 422); arrested (231, 249, 300); took (235, 266.1); cousin (242, 248); prison (242, 286); flew back (246, 294); kill (254, 327); moment (266.1, 438); South African (288,296); would drop (298, 465);	
	secrecy (261, 298); leg (275.2, 430, 435); months (301, 394); protection (347, 460); unsure (359, 383); warm (361, 424); comforted (362.2, 416); healthy (363, 366); turned (375, 405); bioluminescent (382, 408); body (396, 443, 454); vitiligo (399, 402); held (413, 438); sensation (416, 434); cool (425, 444, 454); groin (426, 433, 453); breeze (426, 434); brought (433, 454); foot	
SynE	(433, 453); sand dune (436, 445, 449); branches (439 (x2)) went on (51, 181)— carried on (113)— kept on (458); started (74, 370)— began (301); exactly (138)— precisely (138.2); replied (165)— respond (266.1.1); whispered (166)— muttered(429); money (196, 198.1, 331)— cash (223, 279); program (208)— project (218); powerful (214)— sophisticated (340); afraid (186, 268, 416)— scared (255); find (270,362.1)— had discovered (422.1); messages (293.1)— notes (298)	11 (01.07)
Co-hypo Co-mero	chair (29.1, 333)— table (75, 275.1, 315) hand (12, 15, 20, 93, 146, 214, 330, 353, 360, 405, 413, 420, 454)— fingers (16, 19, 47)— wrist (47.1)— eyes (93)— throat (131)—palms (363)— groin (426, 433, 453)— leg (430, 435)— face (431)— foot (433, 453)— toe(448)	01 (00.10) 01 (00.10)
Coll	drinks (25, 83, 235)— waitress (41)— hungry (66, 85)— restaurant (81)— food (82, 84); journalist (73)— reporter (101, 106)— press (117); researcher (107, 156, 228)— test (118, 136)— lab (202, 406, 418)— research facilities (217, 406)— scientists (228.2, 422); answer (123,342)—questions (302); branches(439(x2))—leaves (439)	05 (00.49)

<u>Table 2</u>: Distribution of cohesive features in the text

A cursory look at the table above unveils that the text under scrutiny is made of three major types of cohesion: reference, conjunction, and lexical cohesion. A further consideration of the distribution shows that the three cohesive devices are distributed unevenly in the text: reference: 394 (i.e. 38.21%), conjunction: 68 (i.e.

06.58%), and lexical cohesion: **569** (i.e. **55.20%**). This denotes that the author's mostly used cohesive feature is lexical cohesion, which is first followed by reference and then conjunction.

As illustrated above, in terms of lexical cohesion, five main subcategories are identified: repetition (53.44%), synonymy (01.07%), collocation (0.49%), co-hyponymy (0.10%) and co-meronymy (0.10%). Strikingly, it appears that the author has made a massive use of repetition, which is significant when it comes to grasping the field of the text. In this text, three major repeated lexical items are foregrounded. The first most repeated lexical item is Farai, which is repeated 19 times in the identified clauses: (15), (25), (29), (34), (51), (71), (89), (91), (234), (290), (305), (317), (348.1.2), (351), (423), (429), (430), (443), and (456). The second highly repeated lexical item is Bello, occurring 16 times: (166), (168), (176), (177), (198), (212), (215), (224), (226), (229), (237), (260), (278), (293), (324.1), (326). Finally, the third mostly repeated lexical item is Melissa, with an occurrence of 15 times: (1), (14), (30), (44), (67), (69), (85), (126), (167), (284), (347), (416), (437), (451), and (457). At this point, it can be inferred that the text develops around the three participants: Farai, Bello, and Melissa. Obviously, Bello is at the heart of every twist and turn in the text insofar that he wants to promote brain gain in Nigeria. Unfortunately, the project turns out bad, swallowing up the lives of the scientists he wants to use, including that of Melissa's father. Furthermore, the three main lexical tokens corroborate Thompson's (2014:216) argument that: "Lexical repetition is a powerful cohesive device which, in most texts, does a great deal of the work of making the text hang together..."

Considering reference, it is evident that the four categories are present in the text: anaphoric (367/35.60%), cataphoric (02/0.19%), exophoric (13/01.26%), and homophoric (12/01.16%). It turns out that the most deployed type of reference is anaphora, which falls within the scope of endophora. In the realm of anaphoric reference, it appears that three principal head items are of note since they span the entire text. These prominent head items contain Farai, Melissa and Bello, thereby unveiling that this extract is constructed around the three participants, where Farai and Melissa ponder Bello's brainchild—brain gain — which has not been able to come to fruition. In the first- long chain, the reference items "she" and its variants "her", "hers" and "herself", "you", and its variant "your", and "I" and its variants "me" and "my" are deployed. In the second-long chain, the reference items "I" and its variants "me", "my" and "myself", "he" and its variants "his", "him" and "himself", and "you" and its variant "your" are employed as well. In the end, in the last-long chain, the reference item "he" and its variants "his" and "him" are also used. It is evident that the use of these reference items refer anaphorically to the referents "Farai", "Melissa", and "Bello". Interestingly, this huge amount of anaphoric reference is mostly personal and possessive items, which might be a characteristic of a prose fiction. Meanwhile, this denotes a common way of using pronouns. Actually, the usual way of deploying pronouns in a text is that the antecedent comes before the pronoun. And it is obvious that Olukotun has abode by this norm of writing in his fiction. There is also a minor occurrence of cataphoric reference, which exudes somehow that the author has bridged this norm of using pronouns since he has introduced first the pronoun and then its antecedent. The tiny number of exophoric reference and homophoric reference is not insignificant. Literally, it shows to some extent that the text has some features of spoken and written modes.

As regards conjunction, two major subcategories are explicitly used in the text: extension (23/02.23%) and enhancement (45/04.36%). A look at these figures shows that enhancing conjunctions are mostly employed in the excerpt. And among these enhancing instances, causal-conditional conjunctions narrowly rank first (22/02.13%), which subsumes under the concessive conjunctions "but" and "only that" respectively used in (2), (56), (74), (79), (122.2), (156), (190), (224), (228.2), (239), (321), and (407), and (296), the conditional "if" and "whether" respectively deployed in (33), (59), (323), (325), and (367), and (296), the causal "because" in (268) and (337), and the consequential "so" in (273). It stands out that these conjunctions are employed to build some oppositional and conditional logic throughout the text. Then follows spatio-temporal conjunction, ranking second (21/02.04%) and occurring mostly with temporal markers in the form of "but when" in (18), "and" (meaning "and then") in (29.2), (47.2), (80), (83), (316), (444), (448), (452), (453), and (458), "until" in (31), "when" in (96), (135), and (220), "now when" in (132), "since" in (300), "then" in (360) and (375), "and then" in (413), and "while" in (454). It can be inferred that these conjunctive tokens presage the sequential presentation of events in the extract, which is a feature of fiction. Finally, the less used enhancement is that of manner (02/0.19%) and it occurs principally as comparison in the form of "as if" in (436) and "like" in (467). In view of these two conjunctive items, it can be said they denote somehow that some clauses are utilized to express behavioral logic in the text.

Unlike enhancing conjunctions, extensive conjunctions, with a figure of 23/02.23%, rank second in the text whereby the additive conjunction "and" has the highest score (16/01.67%) and occurs in (4), (16), (38), (46), (50), (55), (71), (86), (138.2), (189), (204), (250), (253), (262), (302), and (348.1.2). It is also crystal clear that these additive devices are deployed to reinforce or add new information in the text. Apart from these additive features of conjunction, the adversative conjunction "but" (05/0.49%) is also found in (52), (295), (310), (410) and (425.1). They somewhat encode oppositional logical meaning in the text. Slightly similar to the

adversative device, the variative conjunction "or" (02/0.19%) also materializes its presence in (5) and (238), which is meant to convey logical ideas in a different manner.

Surprisingly, the table shows no occurrence of elaborative conjunctions. In fact, they are implicitly expressed in the text— there are no conjunctive markers signaling their presence. And the analysis of paratactic elaboration is of key in that it has helped to unveil their occurrence in clause pairs such as (40) and (41), (114) and (115), (230) and (231), (262) and (263), (308) and (309), (358) and (359), (371) and (372), and (462) and (463). This logical meaning occurs when the secondary clauses restate or develop the thesis of the primary clause. Now let us move on to analyze in detail the clause complex features in the text.

Analysis of the Clause Complex Features in the Text

The table below shows the clause complex features identified in the text.

Types of log features	gico-semantic	Logico-semantic nexuses	Frequency & %		
icatures	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$				
	1^=2	1(40) ^ =2(41); 1(114) ^ =2(115); 1(230) ^ =2(231); 1(262) ^ =2α(263); 1(308) ^ =2(309); 1(358) ^ =2(359); 1(371) ^ =2(372); 1(462) ^ =2(463)	, , ,		
Parataxis	1^x2	$ \begin{array}{llllllllllllllllllllllllllllllllllll$	24 (10.81)		
	"1^2	"1(7) $^{\circ}$ 2(8); "1(9) $^{\circ}$ 2(10); "1 (11) $^{\circ}$ 2(13); "1(21) $^{\circ}$ 2(23); "1(25) $^{\circ}$ 2(26); "1 (27) $^{\circ}$ 2(28); "1 (32) $^{\circ}$ 2(34); "1 (37) $^{\circ}$ 2(43); "1 (49) $^{\circ}$ 2(51); "1 (52) $^{\circ}$ 2(61); "1(62) $^{\circ}$ 2(63); "1(64) $^{\circ}$ 2(65); "1(66) $^{\circ}$ 2(67); "1(87) $^{\circ}$ 2 $^{\circ}$ 2(88); "1(90) $^{\circ}$ 2(91); "1(92) $^{\circ}$ 2(95); $^{\circ}$ 2(197) $^{\circ}$ "2(98); "1(102) $^{\circ}$ 2(103); "1(106) $^{\circ}$ 2(110); "1 (111) $^{\circ}$ 2(112); "1(114) $^{\circ}$ 2(125); "1(127) $^{\circ}$ 2(128); "1(130) $^{\circ}$ 2(130.2); "1(142) $^{\circ}$ 2(144); "1 (147) $^{\circ}$ 2(148); "1(149) $^{\circ}$ 2(151); "1(154) $^{\circ}$ 2(160); "1 (162) $^{\circ}$ 2(163); "1 (164) $^{\circ}$ 2(165); "1(166) $^{\circ}$ 2(167); "1(168) $^{\circ}$ 2(170); "1(171) $^{\circ}$ 2(173); "1(175) $^{\circ}$ 2(180); "1(181) $^{\circ}$ 2(182); "1 (183) $^{\circ}$ 2(198.3); "1 (199) $^{\circ}$ 2(200); "1(201) $^{\circ}$ 2(233); "1(236) $^{\circ}$ 2(243); "1 (244) $^{\circ}$ 2(245); "1(246) $^{\circ}$ 2(265); "1 (267) $^{\circ}$ 2(271); "1 (272) $^{\circ}$ 2(273); "1(276) $^{\circ}$ 2(283); "1 (287) $^{\circ}$ 2(289); "1 (292) $^{\circ}$ 2(304); "1(318) $^{\circ}$ 2(332); "1(335) $^{\circ}$ 2(346); "1(350) $^{\circ}$ 2(352); "1 (354) $^{\circ}$ 2(355); "1(356) $^{\circ}$ 2(357); "1 (363) $^{\circ}$ 2(369); "1(371) $^{\circ}$ 2(373); "1 (376) $^{\circ}$ 2(378); "1(379) $^{\circ}$ 2(380); "1(381) $^{\circ}$ 2(386); "1(387) $^{\circ}$ 2(388); "1 (389) $^{\circ}$ 2(390); "1(391) $^{\circ}$ 2(393); "1 (394) $^{\circ}$ 2(395); "1(396) $^{\circ}$ 2(397); "1(398) $^{\circ}$ 2(401); "1 (402) $^{\circ}$ 2(404); "1(406) $^{\circ}$ 2(410); "1(414) $^{\circ}$ 2(415); "1(428) $^{\circ}$ 2(429)	65 (27.28)		
	α^=β	$\alpha(35) \ ^\circ = \beta(36); \ \alpha(136) \ ^\circ = \beta(137); \ \alpha(330) \ ^\circ = \beta(331); \ \alpha\alpha(426) \ ^\circ = \beta(427); \ \alpha(434) \ ^\circ = \beta\alpha(435); \ x2\alpha(458) \ ^\circ x2 = \beta\alpha(459); \ x2 = \beta\alpha(459) \ ^\circ x2 = \beta(460)$	07 (03.15)		

$\begin{array}{c} \mbox{'}\beta\alpha(58) \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$			$^{\circ}$ xβ(31); α(32) $^{\circ}$ xβ(33); α(53) $^{\circ}$ xβ1(54); 9) $^{\circ}$ xβ1(70); "βα(76) $^{\circ}$ "βxβ(77); 2α(88) $^{\circ}$ β(93); xβ(96) $^{\circ}$ α1(97); =βα(118.1) $^{\circ}$ α(133); α(134) $^{\circ}$ xβ(135); 'βα(143) $^{\circ}$ (197); α(217) $^{\circ}$ xβ(218); xβ(220) $^{\circ}$ αα(221); 7) $^{\circ}$ xβ(268); =2α (275.1) $^{\circ}$ =2 xβ(275.2); 0) $^{\circ}$ xβ(291; α(295) $^{\circ}$ xβ(296); α(299) $^{\circ}$ 23); xβ(325) $^{\circ}$ α(326); α(333) $^{\circ}$ xβ(334); 7) $^{\circ}$ α(368); α(408) $^{\circ}$ xβ(409); =βα(435) $^{\circ}$ β(446); α(450) $^{\circ}$ xβ1(451); xβx2x2α(453) $^{\circ}$ α2xβα(454) $^{\circ}$ xβx2x2xβxβ(455); α(466) $^{\circ}$	36 (16.22)	
	α ^"β	$x\beta(467)$ $\alpha(75) ^ "\beta\alpha(76); \alpha(191)$	06 (02.71)		
	α^'β	"β(216); α(305) ^ "β1(3 α(44) ^ 'β1(45); α(57) ^ α(108) ^ 'β(109); α(11 'β1(155); α(183) ^ 'βα("β'β'β(194); α(201) ^ α'β(222); α(236) ^ 'β 'β(260); =2α(263) ^ 'β(285); α(310) ^ 'β(3 'βα(319) ^ 'β'β1(320); α 'β(338); α(339) ^ 'β =βα(362.1) ^ =β'β(36 α(437) ^ 'β(438)	34 (15.32)		
	Parataxis	=2(1	9) ^ =21(29.1); 1(47) ^ =21(47.1); 1(152) ^ 152.1); 1(275) ^ =2α (275.1); x21(444) ^ 2(444.1)	05 (02.25)	
Rank-shift Hypotaxis		α^=β α(11 ^ = β=β =β(2 =β(2 β=β x2= ^ α α^xβ 2xβ α(26)	$\begin{array}{l} (2(11.1)) \\ (18) \ ^{} = \beta\alpha(118.1); \ \alpha(130) \ ^{} = \beta(130.1); \ \alpha(138) \\ = \beta(138.1); \ \alpha(161) \ ^{} \times \beta(161.1); \ ^{}\beta\alpha(184) \ ^{} \\ \beta(184.1); \ +2\alpha(204) \ ^{} +2=\beta(204.1); \ \alpha(219) \ ^{} \\ 219.1); \ \alpha(228) \ ^{} = \beta(1228.1); \ \alpha(241) \ ^{} \\ 241.1); \ \alpha(250) \ ^{} = \beta(250.1); \ \alpha(293) \ ^{} \\ 293.1); \ \alpha(324) \ ^{} = \beta(324.1); \ ^{}\beta\alpha(348.1) \ ^{} \\ 1(348.1.1); \ \alpha(362) \ ^{} = \beta\alpha(362.1); \ \times 2\alpha(407) \ ^{} \\ \beta(407.1); \ ^{}\beta\alpha(422) \ ^{} ^{}\beta=\beta(422.1); \ = \beta(425.1) \\ \alpha(426) \\ \alpha(89) \ ^{} 2x\beta=\beta(89.1); \ \alpha(122) \ ^{} \times \beta\alpha(266.1); \\ \beta(1) \ ^{} \times \beta(261.1); \ \alpha(266) \ ^{} \times \beta\alpha(266.1); \\ (266.1) \ ^{} \times \beta\kappa(266.1.1) \end{array}$	17 (07.66) 05 (02.25)	
			$\alpha^{\wedge}\beta$ $\alpha(348)^{\wedge}\beta\alpha(348.1)$		

<u>Table 3</u>: Distribution of clause complex features in the text

The table above exudes three major types of clause complex— parataxis, hypotaxis and embedding or rank shift. A deeper insight into these findings reveals that paratactic clauses score the highest nexuses (111/50%). The next dominant clausal relationship is that of hypotactic relations (83/37.40%), which is followed by rank-shifted clauses (28/12.60%). At this point, it can be inferred that sequences of clauses of similar status or equal significance are linked through additive relation (and), concessive one (but, so), or variative one (or), etc.

Within the relationship of parataxis, it is obvious that paratactic locution, which falls within the range of projection, ranks first with a score of 65 (29.28%) nexuses. As the secondary clause is projected through the primary clause by means of locution, it can be argued that the event narrated in the text is the representation of what is said, not what is thought. And of course, paratactic projection of locutions is common in fictional narratives wherein characters must engage in a dialogue (Eggins, 2004:273). Besides, the huge proportion of paratactic locutions dominating in Olukuntun's craft, there are other relationships as well. There are paratactic enhancing relations (24/10. 81%) which signal the presence of circumstantial or adverbial information in the fiction. On the other hand, the deployment of paratactic extension relations (14/06.31%) is of note in that these relations are meant to extend the meaning of the secondary clauses by adding new information. The other

paratactic relation is that of paratactic elaboration (08/03.60%). Obviously, these clauses are utilized to elaborate or explain others.

A close look at the hypotactic relations shows that they are of five types: extension, elaboration, enhancement, locution, and idea. It is also obvious in the analysis that the relation of hypotactic enhancement has the highest frequency (36/16.22%). This deployment is of importance since the feature of narrative genre is the use of hypotactic clauses to express great dependency based on time, place, cause, condition, manner, etc. (Droga and Humphrey, 2003). The second type of hypotactic relations is hypotactic idea (34/15.32%). This is the pattern for representing a 'thinking', with events depending on mental process clause (Halliday and Matthiessen, 2004:452). In other words, the re-packaging of events occurring in the text has mostly to do with participants' thinking. Unlike hypotactic relations which are profusely used in the text under scrutiny, hypotactic elaboration (07/03.15%) and hypotactic locution (06/02.71%) are scantily employed.

In the end, there are some instances of embedded clauses that are of **40** (**17.85%**) nexuses in the text. In other words, whole clauses are packed into a unit of a lower rank (i.e. as a group or within a constituent of a group) (Eggins, 2004:269). This denotes a greater sense of dependency, hierarchy and value within some of the clauses. And among these rank-shifted nexuses, the most recurring one is hypotactic elaboration, with a frequency of **17** (**07.65%**). The next relation is hypotactic enhancement, with a figure of **05** (**02.25%**). Another hypotactic relation under this category is that of hypotactic idea (**01/0.45%**). Although the majority of the embedded clauses are hypotactic, there are some cases of paratactic elaborative embedding, with a frequency of **05** (**02.25%**). At this point, it can be inferred that embedded clauses are more of written mode than spoken mode as Eggins (2004:269-270) writes:

While the principle behind taxis or complex clause is expansion, the principle behind embedding is compression. Complexing is more dynamic: it requires little forward planning, as you can simply chain on another unit of the same type. Embedding is more static: it requires more forethought in the construction of the clause, because you have to be ready to pack the extra meanings in at the right slot. Not surprising, then, complexing is more characteristic of spontaneous, spoken language or informal written texts, while embedding associates more with formal, careful written text.

IV. Recapitulation of the Findings and Conclusion

This paper has set out to explore Olukotun's writing style, both in terms of his use of cohesive devices as well as clause complex or logical relations. The table below provides a firsthand insight into the writer's deployment of cohesive and logical features.

Cohesion Features		Clause Compl	Clause Complex Features	
Types	Frequency & %	Types	Frequency & %	
Reference	394 (38.21)	Parataxis	111 (50)	
Conjunction	68 (06.58)	Hypotaxis	83 (37.40)	
Lexical	569 (55.20)	Rank shift	28 (12.60)	
cohesion				

<u>**Table 4:**</u> Recapitulation of major findings

This study has looked into two levels of clause analysis — around the clause and above the clause. In terms of the around-clause analysis, which is cohesion, it remarkably appears that the text is laden with lexical tokens (569/55.20%), with repetition having a frequency of 482 (53.44%) of the total number of cohesive features. The meaning behind this proportion of the repeated items is that they encode the focus of the extract and also reveals how Olukotun weaves thematic meanings throughout the text in relation to three major participants: Farai, Bello and Melissa. These lexical meanings are reinforced by the considerable employment of reference items 394 (38.21%), where anaphoric ties amount to 367 (37.95%), with personal and possessive items dominating. These references are tied to three main participants—Farai, Bello and Melissa — and they do span the entire text, thereby signaling how tight the excerpt is. Apart from lexical and reference relations contributing to the meaning-making of the text, conjunctive relations (68/06.58%) also add more texture or organizational dimension to the extract. And the most deployed conjunctive items are enhancing instances, with a figure of 45 (04.36%). These devices are utilized to reveal meanings related to time, place, cause, condition, manner, etc., in the making process of the story. Similarly, extensive conjunctions are also encountered in the text, with a frequency of 23 (02.23%). It can be argued that there are some sporadic cases of elaborative logic in the text, but there are no clear-cut markers signaling them. Nevertheless, the analysis of paratactic elaboration within the range of clause complex has helped to unveil these devices.

On the above-clause aspect, the statistics show that there are three principal types of logical relations in the extract— parataxis (111/50%), hypotaxis (83/37.40%) and rank shift (28/12.60%). The highest proportion of paratactic nexuses derives from a huge amount of paratactic locution whereby the secondary clause is projected through the primary one. Above all, it can be highlighted that there are more independent clauses in the text than dependent ones, which denotes that most clauses in the text express meanings of equal status. On the other hand, the high deployment of hypotactic clauses is of note since it signals that meanings are also achieved through clauses of an unequal status. Finally, some other meanings are construed through embedded clauses.

In conclusion, exploring cohesive and clause complex features in *Nigerians in Space* has proven fruitful. It has revealed how the author has used language to realize texture as well as logical-semantic organization in his novel. In other words, it has revealed the cohesive and clause complex features which characterize the writer's literary idiosyncrasy. This paper has not looked at such aspects as Theme and register which are assumed to realize texture in text. Future research can look into the Thematic structure and Thematic features in the same text to see to what extent they contribute to the realization of texture therein. Akogbéto, Allagbé, and Koussouhon (2015) aver that cohesion and register function lexicogrammatically to infuse texture in text. The foregoing claim can also be taken up by future research.

References

- [1]. Adjei, A. A. and Opuku, K. (2017). "The Expansion Relations of Clause Complexing (CC) in the Editorials of the *Daily Graphic*". In *Journal of Literature, Languages and Linguistics*, Vol.30.
- [2]. Akogbéto, P., Allagbé, A. A. and Koussouhon, A. L. (2015). "Cohesion, Register and Text: A Systemic-Functional Study of Chimamanda Ngozi Adichie's Fiction". In *Revue Scientifique Geste et Voix*, No 22, Pp. 1-13.
- [3]. Amoussou, C.Y. (2016). "Exploring the Textual Metafunction in a Biblical-Fictional Parable in Ngũgĩ wa Thiong'o's *Devil on the Cross*". In *International Journal of Applied Linguistics & English Literature*, Vol.5, No.5, pp.215-227.
- [4]. Bloor, T. and Bloor, M. (2004). The Functional Analysis of English. London: Arnold.
- [5]. Booker, M. K, and Thomas, A. (2009). *The Science Fiction Handbook*. Malden, MA: Wiley-Blackwell
- [6]. Brown, G. and Yule, G. (1983). *Discourse Analysis*. Cambridge: Cambridge University Press.
- [7]. Drogga, L. and Humphrey, S. (2003). Grammar and Meaning. Target Text: Australia.
- [8]. Eggins, S. (2004). *An Introduction to Systemic Functional Linguistics* (2nd Ed.). New York and London: Continuum.
- [9]. Farrokhi, F. and Ghandkaran-Shortorban, S. (2014). "Clause Complexity in Applied Linguistics Research Article Abstracts by Native and Non-Native English Writers: Taxis, Expansion and Projection". In *Journal of English Language Teaching and Learning*. No.13, pp. 57-70.
- [10]. Halliday, M.A.K. (revised by Matthiessen, C.M.I.M) (2004). *An Introduction to Functional Grammar* (3rd Ed.). London: Hodder Arnold.
- [11]. Halliday, M.A.K. (1985). An Introduction to Functional Grammar. London: Arnold.
- [12]. Halliday, M.A.K. (1994). An Introduction to Functional Grammar. London: Arnold.
- [13]. Malah, Z., Tan, H. and Md Rashid, S. (2017). "Evaluating Lexical Cohesion in Nigerian Newspaper Genres: Focus on the Editorial". In *International Journal of Applied Linguistics & English Literature*, Vol.6, No. 1, pp. 240-256.
- [14]. Olukotun, D. B. (2014). Nigerians in Spaces. Los Angeles, CA: Unnamed Press.
- [15]. Sagheer Eid, F. M. (2016). "Functional Analysis of Clause Complex in the Language of News Websites Texts: A Comparative Study of Two Articles". In *International Journal of Scientific and Research Publications*, Vol.6, Issue 6, pp. 323-334.
- [16]. Thompson, G. (2014). *Introducing Functional Grammar* (3rd Ed.). London and New York: Routledge.