

RESEARCH ARTICLE

An analysis of Rem Koolhaas's discourses on architecture and urban design using a corpus-based model

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Abstract This paper explores the networks of thoughts behind words by reading architectural texts in the context of linguistics. Using a corpus-based model, our main interest is what the collocational data contribute at an architectural level. The notion of “collocation identification in architecture” was drawn from an analysis of the use of the data for Rem Koolhaas. The data for this study were collected from Rem Koolhaas's articles from 1977 to 2014. An analysis of Koolhaas's ideas about architecture and urban planning was conducted using the AntConc 3.4.4.0 corpus analysis toolkit. The corpus-based model reduced selected articles to words and lexical bundles using the corpus analysis toolkit. This paper explores Koolhaas's thoughts on understanding architecture and the metaphors he uses by analyzing articles using the corpus-based analysis model. The discourse codes in the texts of Koolhaas are examined. A corpus-based model proposal tested on architectural texts has the potential to create new areas of knowledge for architectural discourse. Deciphering the texts and analyzing the codes contribute to the development of new models.

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1. Introduction

Architecture as an intellectual field of knowledge that feeds on linguistics. This study brings a new approach to existing ideas for theoretical studies. Language influences architecture and becomes a connection point for understanding it.

The instrument of linguistics is language (Saussure, 2001). Language is a means of communication that is shaped by human experiences, differs in each community, and

Abbreviations: TA, Theoretical Articles; PA, Practical Articles; TPA, Theoretical and Practical Articles; N, Concordance Lines.

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separates meaning into content and audio units (Martinet, 1998). Chomsky (1957: p. 13) defines language as “a set of (finite or infinite) sentences, each of which is finite in length and formed in a finite set of members.” According to Vardar (2007), language is a system of signs that belongs to a certain community. Regarding language and thought, Vendryes (2001) considers language to be not a casual helper but an indispensable partner of thought. Language allows dimensions of thought to be reached while also allowing thought to develop.

Corpus linguistics treats an entire set of texts prepared for a specific purpose according to various criteria; linguistic material represents a language or any characteristic of a language (Sinclair, 1991). Corpus is “a sufficiently large body of the language to be explored” (Leech, 1991: p. 8). Since language is a system, an innate possibility, the frequency of words is considered the emergence of probability in grammar. Corpus linguistics contributes to many fields of research as it enables researchers to obtain concrete inferences by evaluating linguistic data (McEnery et al., 2019; Nartey and Mwinlaaru, 2019; Durán-Muñoz, 2019; Huntley et al., 2018; Motschenbacher, 2016). According to Halliday (1978), linguistic, social, cultural, and ideological relationships between texts, words, and contexts in corpus linguistics are created by combining texts. Sometimes writers may not know all the meanings of the words they use. Therefore, corpus-based analysis is used to reveal the implicit meaning of discourse and investigate the sub-meanings of produced discourse (Hardt-Mautner, 1995; Morley and Bayley, 2009; Partington, 2003; Stubbs, 2001).

Texts are semantic units of a language (Halliday and Hasan, 1976). Language is not only a formal and semantic formation but also a syntactic formation formed by words as it acts on texts. Collocation, a linguistic approach, can be defined as creating a repository of information that allows the reader to establish an endless network of relationships where the relationship between texts and words is presented at a linguistic level. Discourse is a system of expressions that make up “an object” or a “language used in action” (Parker, 1992; Blommaert, 2005; Barker and Galasinski, 2001). Understanding discourse means understanding text/speech in context (Van Dijk, 2008: p. 3). Discourse refers to the essence of a communicative person’s thoughts and perspectives in verbal form. It is the linguistic practice that establishes the rules and procedures for the creation of objects and speakers (Shapiro, 1992; Graaf, 2001). It ensures the creation of social identities and relations. Changes in discourse modify the social world (Jørgensen and Phillips, 2002).

All of the lexical relationships depending on the texts that reveal clues about architectural discourse can be considered as an output of collocation (Yazıcı and Durmus Ozturk, 2017). Various corpus analysis toolkits are designed to allow readers to easily examine texts using the collocation method. They enable the objective and safe detection of language patterns as they contain many of the words and lexical bundles that constitute texts (Reppen and Simpson, 2002). In addition to the numerical and objective information obtained, the positions and frequency of words allow the reader to produce meaning by revealing (Durmus Ozturk and Yazıcı, 2017).

The analysis of Koolhaas’s ideas about architecture and urban design with linguistic elements (words and phrases)

and semantic references ensures that the architect’s background thoughts are visible. It contributes to the architectural agenda by creating new discussion environments for architects, artists, politicians, architecture students, and other theoreticians (Yazıcı, 2019). In this context, the textual material for this paper consists of written articles by Rem Koolhaas, a designer, academician, theoretician, and sophisticated architect who proposes innovations on how to design urban areas. Koolhaas, unlike the contemporary writers of his time, is deemed worthy of investigation on a textual level due to his effective discourses from a perspective that embraces globalization and capitalism.

This article explores the networks of thoughts behind the words by ensuring that architectural texts are read in the context of linguistics. An analysis of Koolhaas’s ideas about architecture and urban design is conducted using an AntConc 3.4.4.0 corpus analysis toolkit. AntConc 3.4.4.0 has been deemed appropriate as it can objectively detect language patterns that contain many words and lexical bundles that constitute texts, ensuring valid findings. Thus, Koolhaas’s discourses have taken on a new dimension with a corpus-based analysis model on the axis of the architect–discourse relationship. This new dimension is an example of a rereading study examined through Koolhaas’s articles on the relationship between architecture and linguistics.

In the corpus-based analysis, our main interest is what the collocational data contribute at an architectural level. For this purpose, the notion of “collocation identification in architecture” is drawn from the analysis of the use of the data for Koolhaas. This paper addresses the following main research questions:

- RQ1. How do the words inform the reader about Rem Koolhaas and his architecture?
- RQ2. Can the relationship between the architect and his discourse be demonstrated by objective data?
- RQ3. What are the links between data, words, and contexts, if any?

2. Architecture, linguistics, and discourse

Since the 1960s, linguistics has evolved toward an understanding of architecture and reintroduced concepts such as “message, language, expression, representation” in architecture; the influence of a theoretical approach that has shaped disciplines such as literature and philosophy has become dominant in architecture. The idea that architecture is a language and produces discourse is more dominant as the disciplines of architecture and linguistics consist of a code system and produce meaning with the discourse represented.

The linguistic theory of Ferdinand de Saussure is one of the most important developments that occurred in the 19th century. In “Course in General Linguistics,” Saussure (2001) developed an approach that radically changed the understanding of language. The linguistic method and theory he created indicate that language is a system of signs. According to Saussure, writing and language are treated as two separate systems of signs. However, writing is a language that exists only to represent spoken language; the oral tradition exists completely independently of the

written tradition. Since a discourse analysis that is distant from linguistics subjects and concepts would be incomplete, the relationship between linguistics and discourse is seen as crucial in the creation of the relationship between the author/producer and the context of the text (Uz Sönmez et al., 2009).

In linguistics, discourse is defined as either “language over sentence” (Stubbs, 1983: p. 1) or “language in sentence use” (Brown and Yule, 1983: p. 1; Baker, 2006). According to Burr (1995), discourse is categorized to combine a certain version of several events, such as meaning, metaphor, representation, image, story, expression, etc. Foucault formulates language as discourse (Hall and Gieben, 1992: p. 291), and the purpose of which is to produce knowledge (Mitchell and Iglesias, 2020: p. 187). According to Foucault (1972: p. 49), discourse can also be defined as “applications that systematically format spoken objects.” It establishes its own boundaries, divisions, transformations, and forms of temporality (Foucault, 1972; Jørgensen and Phillips, 2002). Discourse is also characterized by the way it combines various concepts and how certain concepts are associated with a central role. In the conceptual analysis of discourse, one observes how concepts exist side by side and how concepts imported from other discourse formations are transformed again (Fairclough, 2004; Ifversen, 2003).

Architecture is a discourse with symbolic references—where there is no symbol, there is no architecture. For this reason, the multi-layered relationship between concepts, symbols, and forms becomes a tool of architecture. Architecture works through language; the architectural object is easily displaced and even subject to a wider audience. If architecture is considered a means of communication, architecture forms all social and religious nature as a communicative form and symbol. This paper explores the relationship between architecture and linguistics and between words, meaning, language, and discourse. These relationships also become important points that will contribute to architectural theory. Architects are often discussed and defined through their actions/designs. However, it is possible to identify architects through discourse. In this context, this study uses the collocation method of linguistics as a means of understanding and interpreting an architect through words.

3. Materials and methods

This paper explores the networks of thoughts behind words by analyzing Koolhaas’s articles using a corpus-based model and reading architectural texts in the context of linguistics. A corpus is created in the context of architecture; frequency of words is investigated through collocation, concordance, and clusters. This section has three subsections: collocation identification, data collection, and data analysis. Collocation identification describes the method of corpus linguistics used in corpus-based studies. In the data collection section, Koolhaas’s articles constituting the corpus of this paper are identified. In the data analysis section, the corpus created from Koolhaas’s articles is analyzed and a corpus-based model is proposed for the discipline of architecture.

3.1. Collocation identification

Collocation can render reliable and fast results in studies of texts, sentences, words, grammar, and discourse; it is an alternative method for the evaluation of literary materials (Widdowson, 2007; Sinclair, 1987). The collocations associated with a word are important for meaning (Firth, 1957; Gyllstad, 2007; Clear, 1993; Yazıcı and Durmus Ozturk, 2017). Collocation plays an important role in linguistics studies regarding the intimate relationship between the words in a language and the state of revealing the unions and reappearances of words in their contexts (Sinclair, 1987; Cruse, 1986: p. 40; Benson, 1990; Smadja, 1993: p. 143).

Context as a language element occurs as a result of the association of a word with other words at the sentence or text level (Önder, 2014). To understand the meaning of a word, it is necessary to examine its context. The link between elements in collocation is expressed as the relationship between a central word and its surrounding words (Seretan, 2011). Storing vocabulary in the mind with certain contexts illuminates how readers can easily make sense of and take advantage of sense in linked phrases. Otherwise stated, collocation is defined as a textual phenomenon and is considered an output of word relations in texts (Hoey, 1991).

By moving the collocation of a word to the text level, linguists create a corpus to examine the use of words within a text. To investigate the words used by an author in a corpus, it is necessary to examine the frequency of use of both words and collocations. In this paper, architectural texts are reduced to words and lexical bundles using the corpus analysis toolkit. Through words and their collocations, the author’s purpose and the expression of their thoughts are objectively analyzed.

3.2. Data collection

The data for this paper were collected from Koolhaas’s articles from 1977 to 2014 (Table 1). The articles were grouped into three categories: theoretical articles (TA), practical articles (PA), and theoretical and practical articles (TPA) (those combining both theory and practice).

3.3. Data analysis

The data analysis includes three steps: Material, Tool, and Analysis (Table 2). Articles by Koolhaas were analyzed in the material step; the word list, concordance, collocates, and clusters/n-grams tools of AntConc 3.4.4.0 were analyzed in the tool step; and the codes in articles were analyzed using the tools of AntConc 3.4.4.0 in the analysis step.

Koolhaas’s articles were analyzed in three different operations in the analysis (the third step of data analysis, as stated in Table 2). In the first operation, Koolhaas’s TA/PA/TPA corpus frequency tables were created using the “word list” tool of AntConc 3.4.4.0. The frequency table was then constituted by selecting 10 words in the corpus created from TPA. In the second operation, using the “collocates” tool of AntConc 3.4.4.0, the collocation of each word in the right and left contexts was determined for 10 words obtained in the previous stage. In the third operation, using the “clusters/n-grams” tool of AntConc 3.4.4.0, a table was created for the

Table 1 Chronological table of articles written by Koolhaas (Source: Authors, 2022).

Number	Year	Name of article	Name of a journal/magazine/book (see references)
1	1977	'Life in the Metropolis' or 'The Culture of Congestion'	Architecture Theory Since 1968
2	1981	Project for the Renovation of a Panopticon Prison	Artforum
3	1989	Bibliothèque de France, Paris	Architecture Theory Since 1968
4	1993	About the Results (Winners in the Shinkenchiku Residential Design Competition, 1992. Theme: House with No Style)	Japan Architect
5	1994	Bigness or The Problem of Large	Domus
6	1995	The Generic City	S, M, L, XL
7	1995	Congrexpo at Lille	Domus
8	1995	Whatever Happened to Urbanism?	Design Quarterly
9	1996	No Grounds Against a Non-Place	Euralille: The Making of a New City Center Koolhaas, Nouvel, Portzamparc, Vasconti, Duthilleul
10	1998	The Architects' Ball – A Vignette (1931)	Oppositions Reader: Selected Readings from a Journal for Ideas and Criticism in Architecture, 1973–1984
11	2000	Consumption Gulags	NPQ: New Perspectives Quarterly
12	2000	From Lagos to Lagos	Anymore
13	2001	Pearl River Delta (Harvard Project on the City)	Mutations
14	2001	Junkspace	Domus
15	2002	Junkspace	October
16	2003	Skyscraper: A Typology of Public and Private	The State of Architecture at the Beginning of the 21st Century
17	2010	Junkspace	Constructing a New Agenda: Architectural Theory, 1993–2009
18	2011	Cronocaos	Log
19	2014	Rem Koolhaas: Countryside Architecture	Icon Journal

word clusters in the right and left contexts of each word in the frequency table of the words selected in the TPA corpus. Using the “concordance” tool of AntConc 3.4.4.0, contexts in which the words selected in the TPA corpus were included in the texts were identified. In line with these data, according to the frequency table of the corpus created from TPA, an evaluation was made by including quotations that illuminated the architect's discourse.

This paper proposes a model for creating a corpus from the selected Koolhaas articles with AntConc 3.4.4.0 and establishes a dialog between architecture and linguistics and examining architectural texts produced in the theoretical works of architecture. Through the readings, the implicit messages behind Koolhaas's thoughts and figurative language were revealed at the levels of words and discourse, illuminating the meanings he ascribed to society

Table 2 Steps of data analysis (Source: Authors, 2022).

Step 1: material	Step 2: tool	Step 3: analysis
Rem Koolhaas	Collocation Analysis Tools of AntConc	Analysis of Rem Koolhaas Articles
Rem Koolhaas articles from 1977 to 2014	Word List Concordance Collocates Clusters/N-grams	<p>1st Operation</p> <ul style="list-style-type: none"> • Obtaining TA, PA, TPA corpus frequency tables • Determining the first 10 words in the frequency table created from the TPA corpus <p>2nd Operation</p> <ul style="list-style-type: none"> • Examining the collocations of the determined words <p>3rd Operation</p> <ul style="list-style-type: none"> • Obtaining and examining clusters of determined words

and architecture. The corpus analysis toolkit provided an opportunity to analyze architecture based on the discourses of Koolhaas.

4. Findings and discussion

This section discusses the results of the analysis consisting of three operations of discourses produced by Koolhaas's articles.

4.1. Frequency of the most used words in Koolhaas's discourses on architecture and urban design

To interpret the articles written between 1977 and 2014, a corpus was created in three different categories. These corpora were installed separately on AntConc 3.4.4.0. Using the "word list" tool of AntConc 3.4.4.0, the most commonly used words in these corpora were sorted by frequency and a frequency table was created (Table 3). According to the frequency table, the top three words in the TA corpus were "city," "junkspace," and "architecture." The top three words in the PA corpus were "building," "architecture," and "form." The top three words in the TPA corpus were "city,"

"junkspace," and "architecture" (Fig. 1). Since these words are high on the frequency table, they offer clues regarding the issues or problems on Koolhaas's agenda between 1977 and 2014. For example, the use of 297 city words in the TA corpus indicates that the concept of the city was at the forefront of Koolhaas's agenda and discourse between 1977 and 2014.

The frequency data regarding the words in the TPA corpus provides a view that facilitates the expression of Koolhaas's discourse codes. For example, the word "city" appeared 299 times and was the most commonly used word; this indicates that Koolhaas's thoughts about cities and city issues constituted a significant part of his discourse. The word "junkspace" appeared 230 times, which reveals that Koolhaas introduced a new concept as a result of the modernism movement that began with globalization between 1977 and 2014. The word "architecture" appeared 162 times and supported references to the concepts of "city" and "junkspace" in architecture.

The number of words was scanned by loading the TPA corpus onto AntConc 3.4.4.0 and was found to be 47,710. In line with the scope of this study, the collocations of words concerning the architect–architecture relationship were investigated.

The data analysis used the frequency table for the TPA corpus, which comprised articles 1, 2, 3, 4, 5, 6, 7, 8, 9, 10,

Table 3 TA/PA/TPA corpus frequency table (Source: Authors, 2022).

TA CORPUS		PA corpus		TPA corpus	
Frequency	Word	Frequency	Word	Frequency	Word
297	City	8	Building	299	City
225	Junkspace	5	Architecture	230	Junkspace
157	Architecture	5	Form	162	Architecture
111	Space	4	Architectural	114	Space
103	Building	4	Competition	111	Building
93	Generic	4	Expo	94	Generic
81	World	4	Space	81	World
78	Shopping	3	Center	81	Form
76	Form	3	Concert	78	Shopping
62	Center	3	Auditoriums	65	Center
62	Urban	2	Library	64	Urban
60	Architects	2	History	56	Bigness
56	Bigness	2	House	47	Public
46	Public	2	Mies	45	History
38	History	2	Urban	41	Architects
36	Century	2	Bridge	39	Architectural
36	Place	2	Built	37	Place
35	Architectural	2	City	35	Metropolis
35	Metropolis			34	Urbanism
33	Urbanism			30	Modernization
				30	Preservation
				28	Built
				27	Identity
				27	Manhattan
				26	Design
				24	Airport
				24	Country
				23	Contemporary
				23	Heritage
				22	Metropolitan

Most frequent words from the TA/PA/TPA corpora

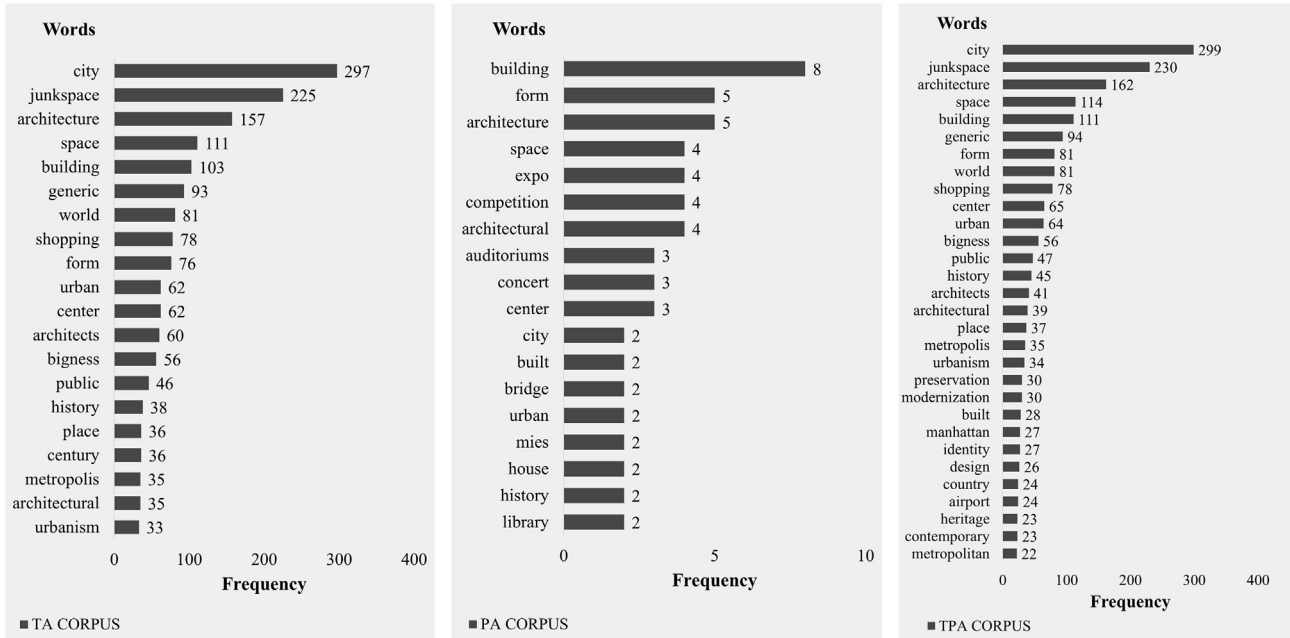


Fig. 1 Most frequent words from the TA/PA/TPA corpora (Source: Authors, 2022).

Table 4 TPA corpus frequency table (Source: Authors, 2022).

Frequency	Word	Frequency	Word	Frequency	Word
299	City	22	Metropolitan	7	Imagination
230	Junkspace	20	Population	7	Planet
162	Architecture	19	Architect	6	Climate
114	Space	19	Mankind	6	Postmodernism
111	Building	18	Cultural	5	Chaotic
94	Generic	17	Construction	5	Citizen
81	World	17	Universal	5	Civilization
81	Form	16	Skyscraper	5	Globalization
78	Shopping	15	Global	5	Restore
65	Center	14	Modernity	5	Urbanization
64	Urban	13	Money	4	Archeology
56	Bigness	11	Monumental	4	Megastructure
47	Public	10	American	4	Residue
45	History	10	European	4	Restoration
41	Architects	10	Protection	4	Revolution
39	Architectural	10	Mies	4	Skyscrapers
37	Place	10	Communities	4	Utopia
35	Metropolis	9	Coney	3	Cyberspace
34	Urbanism	9	Freedom	3	Guggenheim
30	Modernization	9	Historical	3	Heroic
30	Preservation	9	Inhabit	3	Humanity
28	Built	9	Memory	3	Material
27	Identity	9	Theoretical	3	Preserve
27	Manhattan	9	Universe	3	Revolutionary
26	Design	8	Chaos	3	Schiphol
24	Airport	8	Metaphor	3	Zénith
24	Country	8	Museum	2	Agricultural
23	Contemporary	7	Esthetic	2	Americans
23	Heritage	7	Context		

Table 5 Frequency of words from the TPA corpus (Source: Authors, 2022).

Frequency	Word
299	City
230	Junkspace
162	Architecture
114	Space
111	Building
94	Generic
81	World
78	Shopping
65	Center
64	Urban

11, 12, 13, 14, 15, 16, 17, 18, and 19 (Table 4). Table 5 was created for 10 words from the TPA corpus that were sorted from highest to lowest frequency in Table 4. By selecting these words, the limitations of the study were determined.

4.2. The relationship between words and collocations in Koolhaas's discourses on architecture and urban design

The collocations of the words in Table 5 were found using the "collocates" tool in AntConc 3.4.4.0 (Table 6). Thus, access to the word with which each word in the frequency table was most commonly used was provided and sequential relationships were revealed. Since the collocation of each word in the frequency table was of a different

Table 6 Collocations of the words in the frequency table of the most commonly used words in the TPA corpus (Source: Authors, 2022).

Words	Collocations			
	Frequency	Collocations of word	Frequency	Collocations of word
City	90	Generic	4	Public
	37	City	4	Junkspace
	5	Future	3	Urbanism
	5	Architecture	3	History
	4	Urban	2	Towers
Junkspace	26	Junkspace	5	History
	11	Space	5	Architecture
	7	Political	4	Modern
	6	World	4	City
	6	Design	3	Urban
Architecture	18	Architecture	7	Century
	14	Bigness	5	World
	12	Modern	5	Metropolitan
	10	Urbanism	5	Junkspace
	8	Shopping	5	City
Space	19	Junk	3	Theory
	16	Space	3	Modernization
	13	Public	2	Territory
	13	Junkspace	2	Place
	4	Architecture	2	Building
Building	5	Building	2	Political
	4	Architectural	2	City
	2	Theoretical	2	Architecture
	2	Space	1	Identity
	2	Project	1	Facade
Generic	95	City	2	Architecture
	5	Identity	1	Waterfront
	5	Buildings	1	Urbanism
	4	Generic	1	Urban
	2	Memories	1	Structure
World	6	Junkspace	4	Protection
	5	Trade	3	Pollution
	5	Heritage	3	Country

Table 6 (continued)

Words	Collocations			
	Frequency	Collocations of word	Frequency	Collocations of word
Shopping	5	Architecture	1	Urbanism
	4	Shopping	1	Public
	16	Shopping	2	Public
	17	Center	2	City
	9	Architecture	1	Urban
	4	World	1	Modernization
Center	4	Laws	1	Construction
	14	Shopping	2	Space
	5	Trade	1	Architecture
	3	Work	1	Urban
	3	City	1	Monuments
	3	Area	1	Inhabitants
Urban	4	City	2	Metropolis
	3	Junkspace	1	Urbanization
	2	Urban	1	Urbanity
	2	Prototypes	1	Urbanism
	2	Modernism	1	Generic

Table 7 Concordance of the word city.

N	Concordance
46	probably represent the truly generic condition of the contemporary city : history has been almost completely blotted out, the entire territory
1	China. It is perhaps the only sustainable model of, the city – a city that consists of radically different parts that
41	so equipped that one can read the future status the city has chosen for itself. And just as the Russians under
117	the contradiction between rules and ambitions. Architecture is in this city pursued with religious verve. Two-thirds of the papers are
98	a series of patches or a series of blobs. The city no longer has an urban plan; they have a "lifestyle
13	for, and I probably needing streets. The public and the city are not able to provide those streets. Those streets are
38	... Intended for the interior, Junkspace can easily engulf a whole city . First, it escapes from its containers—semantic orchids that needed
51	it preempts the city " or better still, it is the city . If urbanism generated potential and architecture exploits it
168	reflection of present need and present ability. It is the city without history . It is big enough for everybody. It is
30	speed and intensity of production is literally overwhelming. If a city can produce nine hundred towers in ten years, there must

Table 8 Concordance of the word junkspace.

N	Concordance
117	ales into insignificance compared to the heat generated by Junkspace . Junkspace is political: It depends on the central removal of the
113	nd objects, i.e., architecture. Architects could never explain space ; Junkspace is our punishment for their mystifications. O.K., let's
20	. Comfort is the new Justice. Entire miniature states now adopt Junkspace as political program, establish regimes of engineered disorientation,
11	design, taste, or the marketplace—to join the world of Junkspace , and for Junkspace to extend its manifestations under the sky.
107	of crystals, not by nature or design , but by default, Junkspace is like stained glass that has become three-dimensional,
133	new sections of history as extension of Junkspace . Just as Junkspace is unstable, its actual ownership is forever being passed on
131	of Enlightenment, its resurrection as farce, a low grade purgatory ... Junkspace is the sum total of our current architecture ; we have
135	r) product of modernization is not modern architecture but Junkspace . Junkspace is what remains after modernization has run its course or,
47	; because you still need a life, it simulates the city , Junkspace features the office as the urban home, a meeting-boudoir:
9	accounting ... The more indeterminate the city, the more specific its Junkspace ; all of Junkspace 's prototypes are urban —the Roman Forum

Table 9 Concordance of the word architecture.

N	Concordance
24	<i>not to abandon architecture but, on the contrary, to mobilize architecture as a way of organizing and looking at the world,</i>
5	<i>Beyond a certain scale, architecture acquires the properties of BIGNESS. The best reason to broach us, has seemed to be the true ambition of modern architecture—an architecture that can support and provoke modern conditions.</i>
9	<i>to revise a certain number of dogmas or theories of architecture and urbanism, and perhaps to re-examine the validity</i>
18	<i>complete saturation of the world with shopping has repercussions for architecture. Even if we, for the most part, chastely abstain, the</i>
60	<i>a mistake to invent modern architecture for the twentieth century; architecture disappeared in the twentieth century; we have been reading a</i>
55	<i>. Now we are left with a world without urbanism, only architecture, ever more architecture. The neatness of architecture is its seduction</i>
61	<i>e inside fantasy. The responsibilities of a specifically Metropolitan architecture have increased correspondingly: to design those hermetic enclaves—blo ...</i>
69	<i>concern for the masses has blinded us to People's Architecture. Junkspace seems an aberration, but it is the essence, the</i>
98	<i>ry device to negotiate the contradiction between rules and ambitions. Architecture is in this city pursued with religious verve. Two-thirds</i>
10	

frequency, the top ten most frequent words were considered regardless of the number of frequencies.

When the collocations of all words in Table 5 were examined, it was determined that they were used in relation to each other (Table 6). Through the concepts that



Fig. 2 Seven architects appearing as their own buildings in the show *Skyline of New York* (1931) (Source: Koolhaas, 1998: pp. 580–581).

Table 10 Concordance of the word space.

N	Concordance
35	<i>, and it never aspired to it. We think junk space is an aberration, a temporary setback, but that is</i>
42	<i>major currencies. This is a manifesto, and this virtual space is more pertinent than the space of the Computer</i>
44	<i>a large void. (Unknowingly, you always inhabit a sandwich. Space is scooped out of Junkspace as from a block</i>
57	<i>, vibrant as a computer rendering ... The curse of public space: latent fascism safely smothered in signage, stools, sympat ...</i>
78	<i>. . Mankind is always going on about architecture. What if space started looking at mankind? Will Junkspace invade the body?</i>
50	<i>, we have only looked at its containers. As if space itself is invisible, all theory for the production of</i>
83	<i>ers, renovations, conversions, casinos, theme parks, public space. The built sediment of modernization is not modern architect ...</i>
2	<i>the history books). Junkspace is the body-double of space, a territory of impaired ambition, limited expectation, red</i>
69	<i>the building. That event will take place in the space of 30 min.</i>
104	<i>provision of metropolitan comfort. 11.9 The atrium is void space: voids are the essential building block of the Generic</i>

Koolhaas discussed and those he produced, he influenced the disciplines of architecture and urbanism.

When Table 6 was examined, collocations of the word “city,” such as “generic,” “future,” “architecture,” etc., were at the top of the table. The use of the word “city” in combination with the word “future” often referenced the future of cities (Table 7):

Collocations of “junkspace,” such as “junkspace,” “space,” “political,” and “world,” were at the top of the table. Junkspace, an important concept for Koolhaas, was closely associated with architecture and urban design (Table 8):

The top three words were based on the collocations of “architecture,” such as “architecture,” “bigness” and “modern.” The word “Manhattan” was associated with the words “metropolitan” and “junkspace” and had an important place in Koolhaas’s architecture; however, it was not among the top 10 most frequent collocations for “architecture” (Table 9):

Questioning the architecture and architects of Manhattan, Koolhaas ironically criticized the theatrical representation of architects who represented their buildings by wearing their own skyscrapers (Fig. 2):

“Do these architects know, by virtue of a carefully preserved pragmatic instinct, that the outrageous architecture of Manhattan is a substance that defies rational analysis and will explode in the face of every would-be objective observer? That it would be suicide to solve its problems? That its Solutions can only be found in ruthless extrapolations of its

Table 11 Concordance of the word building.

N	Concordance
17	<i>building for CCTV that is 5.5 million square feet. The building does not consist of a headquarters that is separated</i>
38	<i>variety of reasons – its uniqueness as a purely theoretical building its undeniable architectural quality, the convenience of it</i>
68	<i>h, only two years earlier, seemed entirely theoretical. The Building was a straightforward extrusion of the block it occupies</i>
13	<i>. 11.9 The atrium is void space: voids are the essential building block of the Generic City. Paradoxically, its hollowness in</i>
26	<i>them, but that does not affect the framework. 100-Story Building In 1911 a project for a “100-Story Building” was unveiled</i>
2	<i>complex moment and context, and that will give the building a political charge. The entire building is wrapped in</i>
34	<i>the city: a condition possible only under communism. The building is organized not as a tower but as a</i>
25	<i>zed architecture. Air-conditioning has launched the endless building. If architecture separates buildings, air-conditioning unit</i>
55	<i>building that defines a clear architectural identity but a building that creates and triggers potential, almost in an urbanisti</i>
19	<i>emblems or symbols that will be placed on the building facade. We are exploring iconographies that will be appropr</i>

freakish history? That its issues can only be defined through ritual and incantation? It seems so, as these builders gather in the wings of the small stage (in silence so as not to disturb an ongoing modernistic performance of the Albertina Rasch Dancers) to prepare for the climax and raison d'être of this

Table 12 Concordance of the word generic.

N	Concordance
29	<i>love for it became unconditional. The serenity of the Generic City is achieved by the evacuation of the public</i>
89	<i>ity, like Barcelona, by oversimplifying its identity, turns Generic. It becomes transparent, like a logo. The reverse never</i>
53	<i>by the Generic City beyond its wildest imagination. The Generic City is sociology, happening. Each Generic City is a</i>
9	<i>s ... 11.2 There are interesting and boring buildings in the Generic City, as in all cities. Both trace their ancestry</i>
64	<i>n ... 9.4 Instead of specific memories, the associations the Generic City mobilizes are general memories, memories of memories:</i>

Table 12 (continued)

N	Concordance
59	<i>the integrity of materials. Like everything else in the Generic City, its architecture is the resistant made malleable, an</i>
20	<i>stentialism diluted to the intensity of a Perrier? 9.8 Each Generic City has a waterfront, not necessarily with water- it</i>
36	<i>someplace else establishes, out of the blue, a settlement. A Generic City is born. 6. Urbanism 6.1 The great originality of the</i>
94	<i>piece of equipment that with minimal dissociation from the generic urban plane, minimal means of intensification, accommodates</i>
46	<i>pping- that resists a single overriding interpretation. The Generic City is loosening every structure that made anything coales</i>

evening: becoming their own skyscrapers, they will perform the “Skyline of New York” ballet. For a few moments, they will be an ideal, living city.” (Koolhaas, 1998: p. 582).

When collocations of “space” were examined, the most common collocations found were “junk,” “space,” “public,” and “junkspace” (Table 10):

Table 13 Concordance of the word world.

N	Concordance
46	<i>to design, taste, or the marketplace—to join the world of Junkspace, and for Junkspace to extend its manifestation</i>
75	<i>with our scheme. Thirty years after its construction, the World Trade Center remained a reviled object, even in a</i>
28	<i>therefore need to be preserved as part of the world heritage of mankind as a whole. Considering that, in mbodied about architecture’s ability to organize the social world – was an esthetic and ideological debacle. Our resignation</i>
77	<i>they are totally vigorous in other parts of the world. The architecture of shopping is strictly debased, because</i>
61	<i>trivializing the heritage of all the nations of the world, Considering that protection of this heritage at the nation</i>
16	<i>pollutes to consume. The combined pollution from all Third World cars, motorbikes, trucks, buses, sweatshops, pales into ins</i>
9	<i>of new land in the densest country of the world, therefore allowing us for the first time to exploit subject of urbanism. Now we are left with a world without urbanism, only architecture, ever more architecture</i>
69	<i>gress of Junkspace represents a final Manifest Destiny: the World as public space ... All of the resurrected emblems and</i>
81	
4	

Table 14 Concordance of the word shopping.

N	Concordance
4	<i>his own terms, an incredible way of dealing with shopping and finding an architecture of shopping and for shopping.</i>
18	<i>the logic for the shopping center, just as the shopping center forms the logic for the city. Even residence</i>
54	<i>-Modern, all of these architectures can be read as shopping minus the logos. John Jerde is one of the</i>
39	<i>inevitable that the complete saturation of the world with shopping has repercussions for architecture. Even if we, for the</i>
32	<i>laws of the shopping center or the laws of shopping dictate the configuration and the conceptualization of the</i>
73	<i>ties for work, visits, entertainment, sports, schooling and shopping. Together they would add a communal almost public dimension</i>
27	<i>shopping and defined by shopping. The city is a shopping center with its own captive inhabitants that form the</i>
36	<i>of the urban condition, but the conceptual format of shopping has almost become the self-image of nationhood. In</i>
34	<i>could end on a Faustian bargain with a mouse. Shopping for me is another word for modernization. We are</i>
59	<i>portion of the overall investment in new construction, then shopping represents one quarter of new construction every year in</i>

Table 15 Concordance of the word center.

N	Concordance
30	<i>existence that leave architecture behind. A single shopping center is now the work of generations of space planners,</i>
51	<i>manner. It was the year that the World Trade Center opened, perhaps representing the maximum modernity that Ame</i>
4	<i>paradigms continuously revised and the crossing out of the center, all work both on the most utilitarian and the</i>
21	<i>City is the city liberated from the captivity of center, from the straitjacket of identity. The Generic City breaks</i>
1	<i>liberate in one stroke a huge area in the center, a huge area of new land in the densest</i>
18	<i>humans but begins to note spaces between them. The center empties; the last shadows evacuate the rectangle of the</i>
40	<i>incredible kind of ideal utopian city based on the center of Paris, with seven-story architecture in blocks traversed</i>
19	<i>other urban system I have seen before. In the center, for instance, one can observe the area of an</i>
43	<i>a number of miniature Chinese monuments. So the new center of Shenzhen is just a seamless composition of golf</i>
34	<i>captive inhabitants that form the logic for the shopping center, just as the shopping center forms the logic for</i>

The top collocations of “building” were “building,” “architectural,” and “theoretical” (Table 11):

When collocations of “generic” were examined, the word “city” appeared 95 times. Compared to other words, the high frequency of the collocation “city” with the word “generic” indicated that there was a significant

differentiation; the combinations of words were evaluated as collocational structures (Table 12):

The top three collocations of “world” were “junkspace,” “trade,” and “heritage.” Words such as “pollution,” “history,” and “protection” were also collocations of “world,” revealing the discussion of global issues (Table 13):



Fig. 3 Figures of the Universal CityWalk project (Universal Studios Hollywood/CityWalk, 2022. <https://m.universalstudioshollywood.com/citywalk/>).

The words “shopping,” “center,” and “architecture” were the most frequent collocations of the word “shopping” (Table 14):

“Shopping” influences architects and architecture. An intense interest in shopping in architecture limits the imagination of architects. Koolhaas exemplified this concept by referring to architect Jon Jerde’s project “Universal CityWalk” (Fig. 3):

“Even if we, for the most part, chastely abstain, the aesthetics of shopping seem now to dictate the expectations on architects...One of the more famous projects of Jerde, Universal CityWalk at Universal City, is one of I those, at first sight, simulated urban conditions. I again devoted to shopping. I am personally involved I there as an architect of the Universal site, and I therefore have been forced to spend an entire I summer working in an office that was actually on I CityWalk. What is fascinating is the whole of I mankind passes through these streets, but, actually, I if you look at the street as shopping, there is almost I no shopping going on there...” (Koolhaas, 2001b: 39).

The most common collocations of “center” were “shopping,” “trade,” and “work” (Table 15):

The words “city” and “uninhabited” were also collocations of the word “center;” these words were used in relation to each other. This is a sign of the desolation of

urban centers, according to the article texts, and is supported by the following discourse:

“Dongguan had one big project: to take down the center and to build a new center in the north, on an enormous scale. It is a ghost town: an entire quarter which was supposed to be the future center is mostly uninhabited, except for one small part that is officially designated as the mistress quarter. Here the accumulated mistresses of Thai, Vietnamese, Indonesian and Philippine businessmen fill one of the super blocks, but otherwise the entire center is uninhabited.” (Koolhaas, 2001a: p. 325).

The most common collocations of “urban” were “city” and “junkspace” (Table 16):

In summary, regarding collocations, the TPA corpus related to Koolhaas constitutes an output of lexical relationships that can be analyzed and allows for the establishment of a network of lexical relationships. The collocations of these words in the discourses of Koolhaas are important data regarding the cooperation between these words and their frequency of use. The objective results of the semantic relationships between the words in the frequency table constitute an important step in the expression of the messages in Koolhaas’s discourse for the next operation.

4.3. The relationship between words and clusters in Koolhaas’s discourses on architecture and urban design

The “clusters/n-grams” tool in AntConc 3.4.4.0 allows words to be evaluated in different contexts and groups. Cluster analyses of the use of the words in Table 5 within the TPA corpus were tabled using the “clusters/n-grams” tool of AntConc 3.4.4.0 (Table 18). According to the data in Table 6, each word was matched to high-frequency collocations (Table 17). Cluster analyses of the word pairs “city-generic,” “junkspace-space,” “architecture-bigness,” “building-architectural,” “world-heritage,” “shopping-center,” and “urban-metropolis” in the corpus were performed. The clusters demonstrated the sequential relationship between two or three words in the right and left contexts of the word, revealing semantic references to the word context.

Table 16 Concordance of the word urban.

N	Concordance
41	<i>City is what is left after large sections of urban life crossed over to cyberspace. It is a place</i>
38	<i>simulates the city, Junkspace features the office as the urban home, a meeting-boudoir: desks become sculptures, the work-</i>
55	<i>combined in a brutal way with large chunks of urban substance. The urban substance has polarized into only two</i>
61	<i>redictable has been removed. All Junkspace’s prototypes are urban—the Roman Forum, Metropolis, the Future; only their synergy</i>
18	<i>way to establishing a definitive, global “triumph” of the urban condition? Modernism’s alchemistic promise—to transform qua</i>
19	<i>We already have the paradigmatic image for this new urban condition: the presence of the metropolis and the most</i>
16	<i>cture and urbanism. Pervasive urbanization has modified the urban condition itself beyond recognition. “The” city no longer e</i>
64	<i>imultaneously swollen and shrunk. Junkspace reduces what is urban to urbanity ... Instead of public life, Public Space™: what</i>
40	<i>ributions—the reinvention of psychological space. Since the urban is now pervasive, urbanism will never again be about</i>
47	<i>f equipment that with minimal dissociation from the generic urban plane, minimal means of intensification, accommodates the u</i>

Table 17 Matching of high-frequency collocations according to the collocations of the most commonly used words in the TPA corpus (Source: Authors, 2022).

Words (Frequency)	Collocations of Words (Frequency)
City (299)	Generic (90)
Junkspace (230)	Space (11)
Architecture (162)	Bigness (14)
Building (111)	Architectural (4)
World (81)	Heritage (5)
Shopping (78)	Center (17)
Urban (64)	Metropolis (2)

Table 18 Cluster distributions of the use of collocation word pairs in Table 17 in the TPA corpus (Source: Authors, 2022).

Words	Left context		Right context	
	Clusters	Frequency	Clusters	Frequency
City	City of exacerbated	7	The generic city	75
	City music hall	5	The traditional city	3
	City like lagos	2	The contemporary city	3
	City junkspace features	3	The classical city	3
	City of city	2	Bastard city	2
	City liberated from	1	An old city	1
	City if urbanism	1	And reconstituted city	1
			Ideal utopian city	1
			The historic city	1
Generic	Generic city	79	City the generic	5
	Generic cities	4	The truly generic	1
	Generic urban	1	Proportion of generic	1
	Generic memory	1		
Junkspace	Junkspace. junkspace is	5	Frontier of junkspace	4
	Junkspace represents a	3	Third millennium, junkspace	3
	Junkspace's prototypes	2	World of junkspace	1
	Junkspace's modules	2		
	Junkspace is space	2		
	Junkspace's histories	2		
	Junkspace sheds architectures	2		
Space	Space; junkspace is	2	In virtual space	4
	Space-junk is	2	Production of space	2
	Space, discover casinos	2	Explore public space	2
	Space of flows	2	Junkspace is space	2
	Space into "public	1	New space	2
	Space of expo	1	Old space	2
	Space of human	1	A semantic space	1
	Space planners, repairmen	1	Architectural space	1
		Contemporary space	1	
Architecture	Architecture and urbanism	3	Not modern architecture	3
	Architecture remains essential	2	People's architecture	2
	Architecture of shopping	2	Of official architecture	2
	Architecture and landscape	2	Invent modern architecture	2
	Architecture's supposedly	1	Art and architecture	1
	Architecture and behavior	1	Bigness transforms architecture	1
	Architecture and criticism	1	City, its architecture	1
	Architecture biennale, that	1	Form of architecture	1
	Architecture bigness = urbanism	1		
	Architecture is megalomaniac	1		
Bigness	Bigness by theorizing	1	Theory of bigness	4
	Bigness can architecture	1	Architecture bigness	3
	Bigness perplexes; bigness	1	Architecture reveals, bigness	1
	Bigness transforms architecture	1	Attraction of bigness	1
	Bigness, architect are	1	Bigness perplexes; bigness	1
	Bigness = urbanism vs	1	Structure of bigness	1
Building	Building. if architecture	2	As repressive, building	2
	Buildings of liquid	2	Collection of buildings	2
	Building materials	2	The 100-story building	2
	Building a political	1	The chrysler building	2
	Building are accessible	1	Ancient building	1
	Building, materiality was	1	Big building	1
	Building techniques	1	Theoretical building	1

Table 18 (continued)

Words	Left context		Right context	
	Clusters	Frequency	Clusters	Frequency
Architectural	Architectural history	4	Inchoate architectural	1
	Architectural production	2	Singular architectural	1
	Architectural discourses	1	Strictly architectural	1
	Architectural energies	1	Undeniable architectural	1
	Architectural heritage	1		
World	World trade center	5	The real world	3
	World heritage site	2	The social world	2
	World's surface	1	An authorless world	2
	World's fair	1	An unesco world	2
	World as public	1	New world	1
	World of junkspace	1	Demolition of world	1
	World without urbanism	1	Create a world	1
Heritage	Heritage site	2	Natural heritage	10
	Heritage of outstanding	2	World heritage	3
	Heritage and natural	1	Cultural heritage	2
	Heritage of mankind	1	Unesco world heritage	2
	Heritage of original	1	Architectural heritage	1
Shopping	Shopping center	12	Architecture of shopping	2
	Shopping and architecture	1	Apotheosis of shopping	1
	Shopping and finding	1	New modernities-shopping	1
	Shopping as temporary	1	Safe environments, shopping	1
	Shopping beast in	1	Street as shopping	1
	Shopping, spectacular spatial	1	World of shopping	1
Center	Center of power	2	Shopping center	12
	Center of shenzhen	1	World trade center	5
	Center and circumference	1	Rockefeller center	3
	Center forms the	1	Conference center	2
	Center idea and	1	A new center	1
	Center. the bridge	1	And commercial center	1
	Center. the center	1	Center. the center	1
	Center. the drawings	1	Center: without center	1
Center: without center	1	Future center	1	
Urban	Urban condition	29	New urban	4
	Urban substance	4	Prototypes are urban	2
	Urban system	4	Anti-urban	1
	Urban experiences	2	Asian urban	1
	Urban plane	2	Dense urban	1
	Urban complex	1	Generic urban	1
	Urban continuity	1	Mutated urban	1
	Urban density	1	Post-urban	1
	Urban existence	1	Architectural and urban	1
	Urban organism	1	Forms of urban	1
	Urban plan	1		
	Urban tissue	1		
	Urban production	1		
	Urban territory	1		
	Urban bigness	1		
Metropolis	Metropolis creates loneliness	1	A frantic metropolis	1
	Metropolis of metaphoric	1	Cities. the metropolis	1

(continued on next page)

Table 18 (continued)

Words	Left context		Right context	
	Clusters	Frequency	Clusters	Frequency
	Metropolis of thirty	1	Course a metropolis	1
	Metropolis, the future	1	Fantasy. the metropolis	1
	Metropolis: a spectacle	1	The asian metropolis	1

The word “city” appeared in the TPA corpus (Table 4) 299 times and the word “generic” appeared 94 times. The cluster distributions of these words in the right and left contexts were examined. The word “city” was used in combination with adjectives such as “traditional,” “contemporary,” “classical,” “bastard,” and “historic;” the word “generic” was used with words such as “city,” “urban,” and “memory” (Table 18). The word “city” was often used together with the word “generic” (Table 18).

The contextual relationship in the TPA corpus to this cluster distribution was revealed by the words “city” and “generic.” For example, it is easy to give up things that do not work in a generic city. If any sector has lost its validity in the socioeconomic structure, the structure of the city simply eliminates it. Regarding the functioning of the city in the generic city, Koolhaas (1995a) stated that the remains of those cities are used to constitute the “generic city”:

“The great originality of the Generic City is simply to abandon what doesn’t work- what has outlived its use- to break up the blacktop of idealism with the jack-hammers of realism and to accept whatever grows in its place. In that sense, the Generic City accommodates both the primordial and the futuristic-in fact, only these two. The Generic City is all that remains of what used to be the city. The Generic City is the post-city being prepared on the site of the ex-city.” (Koolhaas, 1995a: p. 1252).

Koolhaas (1995a) considered the unidentified vacant land in the city as the “nothingness of infinite potential” and “tabula rasa.” According to Koolhaas, the “generic city” is expanding thanks to “tabula rasa.” The “generic city” has no spatial problem; there is an occupation of an urban fabric that exists or does not exist when any expansion is needed. The relationship between “generic city” and “tabula rasa” can be observed in the following discourse:

“All Generic Cities issue from the tabula rasa; if there was nothing, now they are there; if there was something, they have replaced it. They must, otherwise they would be historic ... The Generic Cityscape is usually an amalgam of overly ordered sections- dating from near the beginning of its development, when “the power” was still undiluted-and increasingly free arrangements everywhere else.” (Koolhaas, 1995a: p. 1253).

The word “junkspace” appeared 230 times and the word “space” appeared 114 times in the TPA corpus. The cluster distributions of the word “junkspace” in the right and left contexts were examined and the words “space,” “represent,” “architecture,” and “history” were found. The word

“space” was used together with the words “junkspace,” “expo,” “human,” “virtual,” “semantic,” “architectural,” and “contemporary” (Table 18). Koolhaas combined the functions of a shopping mall, airport, congress center, hotel, and art gallery and defined it as a “junkspace.” A “junkspace” is a new space that moves toward the surface of the planet; it is exemplified in the following discourse, where it is the product of modernization and refers to the formation of space as a new paradigm:

“Shopping has introduced, de facto, a completely new paradigm about space. I’ve never talked openly about space before, so here it is. The beauty of airports, especially after each upgrade. Shopping centers, renovations, conversions, casinos, theme parks, public space. The built sediment of modernization is not modern architecture but junk space. This is what I’ve named this new experience of space, “junk space.” (Koolhaas, 2001b: p. 39).

In the TPA corpus, the word “architecture” appeared 162 times and the word “bigness” appeared 56 times. The cluster distributions of the word “architecture” in the right and left contexts were examined; words such as “urbanism,” “shopping,” “landscape,” “criticism,” “bigness,” “urbanism,” “city,” and “form” were found. The word “bigness” was used together with the words “architecture,” “theory,” “attraction,” “architect,” “urbanism,” and “urban.”

The following discourse reveals the relationship between the words “architecture” and “bigness” by mentioning the potential for attractiveness regarding the concept of “bigness;” it emphasizes that architecture can be isolated from the environment and it is influenced only through this concept:

“... the attraction of BIGNESS is its potential to reconstruct the whole, resurrect the real, reinvent the collective, reclaim maximum possibility. Only through BIGNESS can architecture dissociate itself from the exhausted ideological, and artistic movements of modernism and formalism to regain its instrumentality as vehicle of modernization.” (Koolhaas, 1994: p. 90).

Architecture must become free of its environment and “bigness” is viewed as a last resort. In the excerpt below, the state of “bigness” as a landmark in the urban landscape is compared to the world that painter Gerhard Richter portrays in his artworks (Fig. 4):

“Bigness is the last bastion of architecture-a contraction, a hyper-architecture. The containers of Bigness will be landmarks in a post-architectural landscape-a world scraped of architecture in the way Richter’s paintings are scraped of paint: inflexible, immutable,



Fig. 4 Examples of Gerhard Richter's artworks (ArtForum, 2022).

definitive, forever there, generated through superhuman effort." (Koolhaas, 1994: p. 90).

The word "building" appeared 111 times and the word "architectural" appeared 39 times in the TPA corpus. The cluster distributions of the word "building" in the right and left contexts were examined; the words "architecture," "repressive," "theoretical," and "materials" were found; the word "architectural" was used together with the words "history," "production," "discourses," "energies," "heritage," "inchoate," and "undeniable."

According to Marx and Weber, "people of the metropolis are imprisoned in the cage" (Weber et al., 2000). Therefore, the nothingness inherent in the modernization of the metropolis is a symbolic bulldozer and evokes capitalist creative destruction. One of the reasons for the negative effects of the metropolis on people is metropolitan architecture. Koolhaas's discourse on metropolitan life and architecture discusses the impact of buildings on metropolitan people:

"Exteriors and interiors of such structures belong to two different kinds of architectures. The first—external—is only concerned with the appearance of the building as a more or less serene sculptural object, while the interior is in a constant state of flux—of themes, programs, iconographies—in which the volatile metropolitan citizens, with their overstimulated nervous systems, combat the perpetual threat of ennui." (Koolhaas, 1977: p. 328).

In De Koepel, as Koolhaas would underline, with no intervention whatsoever, prisoners could move around 'almost freely', and the surveillance point had been turned into a cafeteria. (Martinez-Millana and Alcaraz, 2022: p. 50). In the excerpt below, the theoretical existence of the panopticon raises the question of the uniqueness of the relationship between building and architecture from a different perspective (Fig. 5):

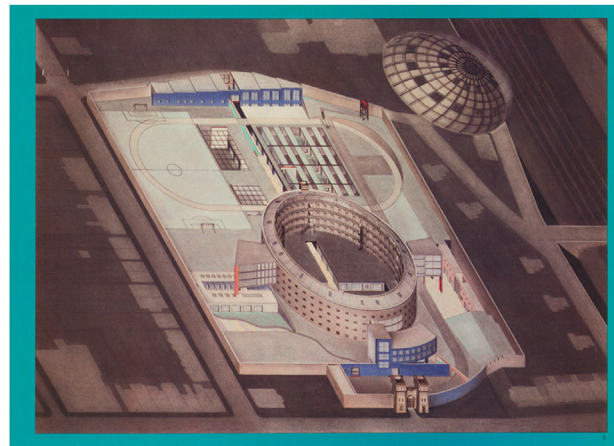


Fig. 5 Axonometric of the panopticon (ArtForum, 2022).

"In the 1950s when the prevailing ideology subscribed to the "pavilion" model of prisons whereby, supposedly for psychological reasons the inmates were divided into small groups this building was condemned and its demolition planned. Now, for a variety of reasons- its uniqueness as a purely theoretical building its undeniable architectural quality, the convenience of its existence—reinforced by the fact that the prison was surprisingly popular with its inmates who like the spaciousness of its vast interior—it was decided that perhaps it should survive." (Koolhaas, 1981: p. 41).

The cluster distributions of the words "world" appearing 81 times and "heritage" appearing 35 times in the TPA corpus in the right and left contexts were examined; they were used in combination with the words "trade," "heritage," "public," "architecture," "urbanism," "real," "junkspace," "site," "natural," "mankind," "cultural," and "architectural."

Koolhaas's discourse on "junkspace" addresses how the contemporary architecture of shopping malls and business centers reduces the value of architecture and contexts. In the discourse, the relationship between the words "junkspace," "real," and "future" is revealed, and it is stated that "junkspace" will be valued over the centuries:

"Junk space is the real thing. The 20th century has developed it, and the next century will be its apotheosis. Logan Airport is now advertising a "world-class upgrade for the 21st century"; the 21st century will be a "world-class upgrade" of the 20th century." (Koolhaas, 2001b: p. 39).

While evaluating the relationship between heritage and architecture, Koolhaas emphasizes internationalization and seeks a global answer to the importance of the concept of heritage. Heritage must include improvements that require the simultaneous consideration of many resources of world countries:

"Considering that protection of this heritage at the national level often remains incomplete because of the scale of the resources which it requires and of the insufficient economic, scientific, and technological resources of the country where the property to be protected is situated, Recalling that the Constitution of the Organization provides that it will maintain, increase, and diffuse knowledge by assuring the conservation and protection of the world's heritage, and recommending to the nations concerned the necessary international conventions ..." (Koolhaas, 2011: p. 121).

The word "shopping" appeared 78 times and the word "center" appeared 65 times in the TPA corpus. The cluster distributions of the word "shopping" in the right and left contexts were examined; words such as "center," "architecture," "temporary," and "apotheosis" were found. The word "center" was used with words such as "shopping," "idea," "conference," and "drawings."

The concept of "shopping" has started to stray from the path produced by the city. Shopping is surreptitiously becoming the way in which urban substance is generated (Lubow, 2000). Shopping infiltrates all kinds of buildings such as churches, educational institutions, and train stations like a hidden virus, invading every moment of life. In the excerpt below, the word "shopping" is associated with many activities:

"At the point we are reaching now, we also find an interesting moment where the separate streaks of the department store, shopping mall, etc. are congealing into one diffuse, continuous, and hybridized experience, where shopping is associated with entertainment, airports, museums, and so on, absorbing almost all activities into a single whole." (Koolhaas, 2001b: p. 36).

The word "urban" appeared 64 times and the word "metropolis" appeared 35 times in the TPA corpus. The cluster distributions of the word "urban" in the right and left contexts were examined; words such as "condition," "plane," "density," "organism," "plan," "production," "territory," "bigness," "anti," "generic," "mutated," "post," and "architectural" were found. The word

"metropolis" was used with the words "loneliness," "metaphoric," "future," "frantic," "cities," and "fantasy."

The below excerpt, which discusses the role of the masters (architects or urban designers) oscillating between the urban space and the metropolis in the existence of a consistent typology in creating a masterpiece, reinterprets the relationship between junkspace and public space:

"Masterpiece has become a definitive sanction, a semantic space that saves the object from criticism, leaves its qualities unproven, its performance untested, its motives unquestioned. Masterpiece is no longer an inexplicable fluke, a roll of the dice, but a consistent typology: its mission to intimidate, most of its exterior surfaces bent, huge percentages of its square footage dysfunctional, its centrifugal components barely held together by the pull of the atrium, dreading the imminent arrival of forensic accounting ... The more indeterminate the city, the more specific its Junkspace; all of Junkspace's prototypes are urban—the Roman Forum, the Metropolis; it is only their reverse synergy that makes them suburban, simultaneously swollen and shrunk ..." (Koolhaas, 2002: p. 184).

Cluster distributions were made by matching the 10 most commonly used words in the TPA corpus according to their collocations. Koolhaas's relationship with other words next to or near the words on the architectural agenda was turned into easy-to-watch legibility in form and content.

The analyses performed for each heading (Sections 4.1, 4.2, 4.3) were conducted in tandem using the tools offered by AntConc 3.4.4.0. Thus, the codes in the Koolhaas discourses were made visible. With the help of the numerical data presented by this corpus analysis toolkit, it was determined that Koolhaas's discourse paved the way for the reintroduction of existing concepts and the formation of new concepts. In summary, the corpus-based model provided significant quality and quantity value for Koolhaas's discourses.

5. Conclusions and recommendations

The present study investigated Koolhaas's discourses on architecture and urban design in his articles published in various journals from 1977 to 2014. These articles addressed the discipline of architecture from different perspectives. The majority of these articles examined and criticized the environment in which architecture is located concerning globalization and modernization. The articles had characteristics of discourse that appeal to many disciplines such as architecture, urbanism, philosophy, and sociology.

If architecture is a textual representation, all kinds of textual research materials can become the subject of architecture. The subject of architectural texts and the expression of the open/implicit thoughts of their authors can be read using linguistic data. This study makes several theoretical, practical, and calculating frequency contributions directly to the field of corpus-based analysis. The method used in the research is an interesting mode of documentation that has rarely been done in architectural theory analysis.

Table 19 Summary of the collocations and clusters of featured words as a result of the analysis (Source: Authors, 2022).

Prominent words	Collocations of words	Clusters
City	Generic City Future	City – generic
Junkspace	Junkspace Space Political	Junkspace – space
Architecture	Architecture Bigness Modern	Architecture – bigness
Building	Building Architectural Theoretical	Building- architectural
World	Junkspace Trade Heritage	World – heritage
Shopping	Shopping Center Architecture	Shopping – center
Urban	City Junkspace Urban Prototypes Modernism Metropolis	Urban – metropolis

The corpus-based model suggested enables the reader to examine multiple texts simultaneously and observe the relationships between words and concepts, such as similarities or differences. To answer the research questions, the study used the AntConc 3.4.4.0 corpus analysis toolkit to examine the articles of Koolhaas and allow the modern user to understand them within the context of architecture and urban design and architecture discourses. By enhancing the accessibility to architectural discourse, it is expected that researchers will be able to gain further insights in to the field.

The first research question addressed how the words inform the reader about Koolhaas and his architecture. According to Table 19, as a result of the corpus-based analysis, collocations and clusters of featured words revealed the prominent keywords in the TPA corpus and the concepts discussed in the discourses of Koolhaas. Koolhaas is an architect who reinvents, defines, and changes the agenda through new concepts by examining architecture from different perspectives and producing sensational discourses. When evaluated as a subject in his discourses, he sometimes acts as an architect, sometimes as an urban theorist, and sometimes as a copywriter who benefits from literary arts. At a time when it is impossible to deny cultural homogeneity and the sameness of places, Koolhaas has established critical discourses and new concepts. In his remarks about architecture, he did much more than explain his projects, addressing problems such as social identity and the functioning of modern societies. His provocative,

cynical, and witty texts have changed the way he views cities, revisiting what architecture has built and how it can embody radical ideas about current issues. Koolhaas, in his critical and ironic discourses, employs figurative discourse language by using different disciplines to express his thoughts on any subject. In doing so, he deconstructs his work (both theoretical and practical) as a writer and as an architect.

The second research question addressed the relationship between the architect and his discourse, as demonstrated by the objective data. As researchers of datasets, we must show an awareness of and discuss issues in a linguistic model, particularly when studying architecture and urban design discourses. An analysis of Koolhaas's discourse and collocations based on the sequences of words led to the disclosure of important data regarding the architect. For example, common words in the TA corpus were "city," "junkspace," "architecture," "building," and "urban." The contexts of these words were examined and it was found that Koolhaas criticized architectural elements concerning the concept of urbanism as a result of globalization by referring to art forms such as painting, dance, and theater. In the PA corpus, the common words were "building," "architecture," "form," and "competition." These words indicate that the PA corpus is based on architectural projects and competition. Some words such as "provocation," "chaotic," "dangerous," "communist," and "revolutionary" were also included in this corpus, demonstrating criticisms of architecture and the architectural–political relationship concerning global issues. In the TPA corpus, the common words were "city," "junkspace," "architecture," "space," "generic," "world," "shopping," "center," and "urban." This shows that Koolhaas's discourse concerns architecture and urban design.

The third research question addressed the connections between data, words, and contexts. The results suggest alternative readings and meanings in architecture and provide theoretical, practical, and calculating frequency contributions. The cluster tables of the selected words were evaluated using the frequency table of the TPA corpus; sequences of words and the codes they evoked were important and the relationships established between the words were revealed in a short and practical way; the selected words were defined by adjectives in different semantic openings and depths. In this context, according to the summary diagram of the six words featured in Koolhaas's articles (city, junkspace, architecture, building, world, shopping, urban), the collocations and cluster distributions of these words are as follows (Table 19):

In conclusion, revisiting the texts with a corpus-based model provides quick and detailed solutions concerning architecture and urban design discourses. With the corpus-based model, Koolhaas's thoughts on understanding architecture were presented through the articles examined to investigate the collocation method used in linguistics and the metaphors used over time. With a full understanding of discursive features, the corpus-based model will be able to reproduce architectural texts. Thus, deciphering the texts and analyzing the codes creates new areas of knowledge for architectural discourse and contributes theoretically to the development of new models.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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