**CHAPTER IV**

**FINDINGS AND DISCUSSION**

This chapter presents findings of the research and discussion. In the first section, the researcher presents the analysis of the findings dealing with the phrase structure patterns occurred. While in the discussion section, the researcher presents the discussion of the findings.

**A. Findings**

In this section, the researcher presents the analysis and answers the research questions concerning with the phrase structure patterns occurred on the headlines in *The New York Times*. The researcher analyzes the phrase structure patterns of the headline and presents the trend of sentence patterns appearing on the headline in *The New York Times* based on their phrase structure rules. The sentence patterns here are the phrase structures that appear in every headline. Later the researcher found out the most frequent phrase structure that appear to indicate the trend of sentence patterns used on the headlines in *The New York Times*. For the clear explanation, the researcher presents the analysis starting with the phrase structure trees patterns, syntactic and lexical categories, and the phrase structures appear. The analysis are presented in the subheadings that follow.

**1. The Phrase Structure Pattern**

 In this section, the researcher presents the analysis of the data she had analyzed. It consists of some types of phrase structure patterns found during the analysis. Later, by reviewing this section, the readers will find out what trend of patterns are occurred on the headlines in *New York Times* online newspaper.

1. **The pattern of S**

The very first pattern presented by the researcher here is the pattern of S. S stands for sentence. It consists of other kinds of pattern which belong to the variety of the pattern of S. In analyzing this pattern, the researcher found that not all of the sentence on the headlines are grammatically arranged. Some sentences are ungrammatically arranged on purpose. In some sentences, there is a passive voice sentence with the lack of ‘to be’ before the past participle (V3). In other case, there is a Present Continuous Tense without ‘to be’ before the present participle (V-ing). The complete presentation is as follow.

**1) The pattern of S 🡪 NP VP**

The pattern above means that the certain headlines consist of noun phrase and verb phrase. In this kind of pattern we have noun as the subject of the sentence followed by a verb as the predicate. Other than noun, it also consists of gerrund as the subject. The pattern above consists of several syntactic categories such as Verb (V), Article (Art), Adjective (Adj), Noun (N), Preposition (Prep) and Proper Noun (PN) with the lexical categories are Adj, PN and N. The data with that kind of pattern are:

Table 4.1

|  |  |
| --- | --- |
| **No.** | **The Pattern of S 🡪 NP VP** |
| 1.2.3.4.5.6.7.8.9.10.11.12.13.14.15.16.17.18.19.20.21.22.23.24.25.26.2728.29.30.31.32.33.34.35.36.37.38.39.40.41.42.43.44.45.46.47.48.49.50.51.52.53.54.55.56.57.58.59.60.61.62.63.64.65.66.67.68.69.70.71.72.73.74.75.76.77.78.79.80.81.82.83. | Helmets Do Little to Help Moderate Infant Skull FlatteningDonors Weigh Jilting Christie for Jeb BushTimeline Describes Frantic Scene at Oklahoma ExecutionSubway Derailment in Queens Injures 19Accident Leads to Scrutiny of Oil SandsDemocrats Struggle to Turn Job Gains Into VotesDeath Stalks Muslims as Myanmar Cuts Off AidMerkel Signals Tension Persists Over U.S. SpyingCar Bombs in Central Syria Kill at Least 19Deadly Attacks Heighten Tension in EgyptTrain Accident Leaves Scores Injured in SeoulGunmen Kill at Least 15 in a Border TownPolice Revise Number of Kidnapped StudentsStudent Protesters Killed in Clashes With PolicePublicist Sentenced for Assaults on WomenLegal Fight Over Nursery School Admissions Keeps Delhi Kids at HomeElection-Season Spoofs Thrive in Social MediaChina Criticizes U.S. Terrorism ReportDebate Over Palestinian Prisoner ReleaseRussians Take Over Ukrainian BaseClashes Continue in UkraineThe World Celebrates Valentine's DayCourt Orders Thai Premier to Leave OfficeSouth Africans Vote as Zuma Seeks Second TermSotomayor Finds Her Voice Among JusticesAfghan Election Front-Runner Secures AllyChina Says Goodbye in the Key of G: Kenny GLanguage Barrier Thwarts Crime Victims in N.Y.European Candidates See Opportunity on Extreme EdgeOngoing Fighting in Iraq's Anbar Hits BusinessesArmed Police Begin Antiterrorism Patrols in BeijingRussia Revisits Its History to Nail Down Its FutureOverextended, Music TV Shows FadeTwo Banking Giants Implore U.S. Authorities to Go EasyPlaintiff Maligns Deal in Silicon Valley SuitLegal Alliance Gains Host of Court Victories for Conservative Christian MovementManchester City Stands Tall in a Season of Dashed HopesCuomo Works to Mend Fences With LiberalsU.S. Trips to Russia Fall Amid ConflictDisease of Pakistan’s Poor Now Worries the AffluentGreen Garlic Stirs a Pot of Chicken SoupScientists Warn of Rising Oceans From Polar MeltWashington Monument Reopens to PublicNigerian Girls Seen in Video From MilitantsHikers Spread Democracy in IndiaBlackBerry Unveils Low-Cost Smartphone in Effort to Win Back IndonesiaLocal Tea Party Activists See Own Groups Among Washington AdversariesVacancies Pose Threat to the FedRussia Keeps Its Distance After Ukraine Secession ReferendumsHuawei Unveils New Phone to Compete With Apple and SamsungVolkswagen Wins Enough Shares to Take Full Control of ScaniaChinese Police Detain Contributor to U.S.-Based WebsiteWarning Spreads as Beijing Clamps Down on Illegal ModelingBus Driver's Actions Credited With Saving Lives in FireWiggins Takes Tour of California LeadRussia Defeats the U.S.Uruguayan Leader Meets With Obama to Talk Trade and Human RightsAuthorities in Spain Make Arrests in Fatal Shooting of PoliticianJames Scores 49 Points in Vintage PerformanceNew York City Police Helicopter Rescues Injured HikerSilver Issues a Response After Sterling’s InterviewGoogle Faces German Order to Change Handling of Personal DataNew Neurons Found to Overwrite Old MemoriesRadio Signals Skew Birds’ Internal NavigationA Patent Surfaces Detailing a Facebook SmartphoneA Charity’s Video Shows Models Duped for a CauseDeadly Illness in Nicaragua Baffles ExpertsPatient’s Cells Deployed to Attack Aggressive CancerUniversal Mammograms Show We Don’t Understand RiskThe Public Health Crisis Hiding in Our FoodThree Shot Dead at Kabul HospitalSteve Jobs Defied Convention, and Perhaps the Law55 Colleges Named in Federal Inquiry Into Handling of Sexual Assault CasesClimate Change Study Finds U.S. Is Widely AffectedChinese Web Giant Files for Public Offering in U.S.Brothers Battle Climate Change on Two FrontsTwo Yemenis Shot by Americans Are Linked to Qaeda CellNew York Police Recruit Muslims to Be InformersUkraine Vote on Separation Held in ChaosThis Time, Get Global Trade RightIsraeli Court Sentences Former Premier to 6 YearsStudy Finds Being Ignored on Facebook May Lower Self-EsteemShariah Official Urges That Gang-Rape Victim Be Caned |

Here is the representative tree diagram of the data above.

 S

 NP VP

 N V NP

 Adj N PP

 Prep NP

 N N

Timeline describes frantic scene at Oklahoma Execution

**S NP VP**

NP 🡪 N

VP 🡪 V NP

NP 🡪 Adj N PP

PP 🡪 Prep NP

NP 🡪 PN N

**2. The pattern of S 🡪 VP S’**

The pattern above means that the certain headlines consist of verb phrase followed by another sentence. In this kind of pattern the verb we have here is in a form of present participle (-ing) as the subject of the sentence followed by another sentence. The pattern above consists of several syntactic categories such as Verb (V), Adjective (Adj), Noun (N), and Preposition (Prep) with the lexical categories are Verb (V), and Noun (N). The data with that kind of pattern are:

Table 4.2

|  |  |
| --- | --- |
| **No.** | **The pattern of S 🡪 VP S’** |
| 1.2. | Plying Social Media, Chinese Workers Grow Bolder in Exerting CloutStruggling Granderson Has His Say for a Night |

The tree diagram of the pattern above is

 S

 VP S’

V Adj N NP VP

 Adj N V Adj PP

 Prep VP

 V N

 Plying social media Chinese workers grow bolder in excerting clout

Phrase structure tree pattern.

S 🡪 VP S’

VP 🡪 V Adj N

S’ 🡪 NP VP

NP 🡪 Adj N

VP 🡪 V Adj PP

PP 🡪 Prep VP

VP 🡪 V N

**3) The pattern of S 🡪 NP (Aux) VP**

The pattern above means that the certain headlines consist of noun phrase followed by an auxiliary and verb phrase. In this kind of pattern the verb we have here is in a form of passive voice, simple future and present perfect. The pattern above consists of several syntactic categories such as Preposition (Prep), Proper Noun (PN), Determiner (Det), Noun (N), and Adjective (Adj). The data with that kind of pattern are:

Table 4.3

|  |  |
| --- | --- |
| **No.** | **The pattern of S 🡪 NP (Aux) VP** |
| 1.2.3.4.5.6.7.8.9. | Jump in Payrolls Is Seen as a Sign of New OptimismHundreds of Afghans Are Killed in LandslidesFirst U.S. Case of MERS Virus Is Found in Indiana Man Who Visited MideastMexican Drug Kingpin Is CapturedThe Future Will See You NowNuclear Talks Will Confront Iran Over Enriched UraniumThey’ve Deleted Their ‘Spacebook’ ProfilesA Voice of Dissent in Egypt Is Muffled, but Not SilentEarly Fitness Can Improve the Middle-Age Brain |

Here is the representative tree diagram of the pattern above.

 S

 NP Aux VP

N PP V PP

 Prep N Prep NP

 Art N PP

 Prep NP

 Adj N

 Jump in payrolls is seen as a sign of new optimism

Phrase structure tree pattern.

S 🡪 NP (Aux) VP

NP 🡪 N PP

VP 🡪 V PP

PP 🡪 Prep N

PP 🡪 Prep NP

NP 🡪 Art N PP

PP 🡪 Prep NP

NP 🡪 Adj N

**4) The pattern of S1 🡪 Coord S2 (S3)**

The pattern above means that the certain headline consists of a coordination (conjunction) that followed by two sentences. Each sentence will consist of several syntactic categories. The pattern above consists of several syntactic categories such as NP, VP, PP, Proper Noun (PN), Verb (V), Adjective (Adj), Noun (N), Determiner (Det) and Preposition (Prep) with the lexical categories are Det and N. The data with that kind of pattern are:

Table 4.4

|  |  |
| --- | --- |
| **No.** | **The pattern of S1 🡪 Coord S2 (S3)** |
| 1.2. | As Newark Fights Many Woes, Mayoral Candidates Take Jabs at Each OtherIf These Walls Could Speak, They’d Say Her Name |

The tree diagram of the pattern above is

 S1

Coord S2 S3

 NP VP NP VP

 PN V NP Adj N V NP

 Det N N PP

 Prep NP

 Det N

 As Newark fights many woes mayoral candidates take jabs at each other

Phrase structure tree pattern.

S1 🡪 Coord S2 S3

S2 🡪 NP VP

S3 🡪 NP VP

**5) The pattern of S 🡪 NP Adv VP**

The pattern above means that the headline consists of noun phrase, adverb and followed by verb phrase. the NP here is a PN. The pattern above consists of several syntactic categories such as Noun (N), Adverb (Adv), Verb (V), Pronoun (Pro), Determiner (Det) and Adjective (Adj). The headline with that kind of pattern is:

Table 4.5

|  |  |
| --- | --- |
| **No.** | **The pattern of S 🡪 NP Adv VP** |
| 1.2.3. | Grandma Never Had It So GoodA Lethal Luge Accident Still QuestionedRussia Quietly Tightens Reins on Web With ‘Bloggers Law’ |

Here is the tree diagram of the pattern above.

 S

 NP Adv VP

 N V Pro Det Adj

 Grandma never had it so good

Phrase structure tree pattern.

S 🡪 NP Adv VP

NP 🡪 N

VP 🡪 V Pro Det Adj

**6) The pattern of S1 🡪 S2 COORD S3**

The pattern above means that the certain headline consists of a coordination (conjunction) that connecting two sentences. Each sentence will consist of several syntactic categories. The pattern above consists of several syntactic categories such as NP, VP, PP, Proper Noun (PN), Verb (V), Adjective (Adj), Noun (N), Determiner (Det) and Preposition (Prep) with the lexical categories are Det and N. The data with that kind of pattern are:

Table 4.6

|  |  |
| --- | --- |
| **No.** | **The pattern of S1 🡪 S2 COORD S3** |
| 1.2.3. | Taking Fares, and Writing in BetweenSilence Is Golden, and Priced AccordinglyThe Premier League Stands if Only Goals by English Players Counted |

Here is the tree diagram of the pattern above.

 S1

 S2 Coord S3

 NP VP NP PP

Art Adj N V N Prep NP

 Adj N V

 The premier league stands if only goals by English players counted

Phrase structure tree pattern.

S1 🡪 S2 Coord S3

S2 🡪 NP VP

S3 🡪 NP PP

1. **The pattern of VP**

The second pattern occurred on the headlines in *New York Times* online newspaper found by the researcher is the pattern of VP (Verb Phrase). The pattern above means that a phrase consists of a verb phrase followed by other phrases. This pattern also consists of several types as explained below.

**1) The pattern of VP 🡪 V (NP)**

The pattern above means that the certain headlines consist of verb phrase and noun phrase. In this kind of pattern we have a Verb Phrase consisting of a Verb alone, corresponding to the rule VP 🡪 V. As a VP must have a V and may have an NP or a PP, or both an NP and a PP. In this pattern, the V is followed by an NP. The data with that kind of pattern are:

Table 4.7

|  |  |
| --- | --- |
| **No.** | **The Pattern of V 🡪 V (NP)** |
| 1.2.3.4.5.6. | Crunching the Numbers to Find the Best AirfareDefending the Open InternetTaking Advantage of Sorrel’s Brief LifeSaving China’s ElephantsShow Us the Drone MemosProtect Our Bats |

The data above still need to be classified into some groups.

a) The pattern of VP 🡪 V (NP) with NP 🡪 N (TP)

This pattern of VP consists of V and NP in which the NP consists of an N and a TP. The pattern above consists of several syntactic categories such as Verb (V), Article (Art), Adjective (Adj), Noun (N) and Tense-mark/Infinitival *to* (T) with the lexical categories are Art, Adj and N.

Here is the tree diagram of the datum no.1 in the table above.

 VP

 V NP

 V Art N TP

 T VP

 V NP

 Art Adj N

Crunching the numbers to find the best airfare

Phrase structure tree pattern.

**VP 🡪 V (NP)**

VP 🡪 V

NP 🡪 Art N PP

PP 🡪 Prep VP

VP 🡪 V NP

NP 🡪 Art Adj N

b) The pattern of VP 🡪 V (NP) with V-ing

The verbs in this pattern of VP is present participle as in the datum 2, 3 and 4. This pattern consists of some syntactic categories such as V, Art, Adj, and N. Here is the tree diagram.

 VP

 V NP

 Art Adj N

 Defending the open internet

c) The pattern of VP 🡪 V (NP) with V1

In this pattern the verbs is in form of bare infinitive as in datum 5 and 6. This pattern consists of some syntactic structures such as V, Det and N. Here is the tree diagram.

 VP

 V NP

 Det N

 Protect our bats

**2) The pattern of VP 🡪 V (TP)**

The pattern above means that the certain headlines consist of verb phrase and prepositional phrase. In this kind of pattern we have a Verb Phrase consisting of a Verb alone, corresponding to the rule VP 🡪 V. As a VP must have a V and may have an NP or a PP, or both an NP and a PP. In this pattern, the V is followed by an PP. The pattern above consists of several syntactic categories such as Verb (V), Tense-mark/Infinitival *to* (T), Noun (N), and Preposition (Prep) with the lexical categories are N and Preposition (Prep). The data with that kind of pattern are:

Table 4.8

|  |  |
| --- | --- |
| **No.** | **The Pattern of VP 🡪 V (TP)** |
| 1. | Trying to Salvage Remains of Blackwater Case |

Here is the representative tree diagram of the data above.

 VP

 V TP

 V T VP

 V NP

 N PP

 Prep N N

Trying to salvage remains of blackwater case

Phrase structure tree pattern

**VP V (TP)**

VP 🡪 V

TP 🡪 T VP

VP 🡪 V NP

NP 🡪 N PP

PP 🡪 Prep N N

**3) The pattern of VP 🡪 V PP**

The pattern above means that the certain headlines consist of two verb phrases. The first verb phrase here is in form of interrogative sentence then followed by another verb phrase. The pattern above consists of several syntactic categories such as Verb (V), Preposition (Prep), Noun (N), Article (Art) and Adjective (Adj) with the lexical categories are V, Art and N. The headline with that kind of pattern is:

Table 4.9

|  |  |
| --- | --- |
| **No.** | **The pattern of VP 🡪 V PP** |
| 1. | Want to Be More Creative? Take a Walk |

Here is the tree diagram of the pattern above.

 VP

 V PP

 Prep VP V Adj Adj VP’

 V NP

 Art N

 Want to be more creative take a walk

The phrase structure tree.

VP 🡪 V PP

PP 🡪 Prep VP

VP 🡪 V Adj Adj VP’

VP’ 🡪 V NP

NP 🡪 Art N

**c. The Pattern of NP**

The pattern above means that the certain headlines are in form of noun phrase followed by a certain prepositional phrase. In this kind of pattern we have noun as the subject of the sentence followed by a prepositional phrase without involving any verb corresponding to the rule NP 🡪 (DET) (ADJ) N (PP). The only constituent required in each NP phrase-structure rule is N; the other constituents --- DET, ADJ and PP --- are optional and must be placed in parentheses. Because DET, ADJ and PP are each optional, we can rewrite NP in many variation of patterns as the researcher found in the headlines. The variation as followed:

**1) The pattern of NP 🡪 N (PP)**

This pattern consists of a single noun as the subject that followed by a prepositional phrase. As a noun is defined as a word that names a person, place, or thing, the nouns appear in this pattern are accordingly various such as abstract noun, proper noun, and common noun. As an NP can consist of one of the three options of constituent as explained above, in this pattern, it only consists of N and PP. This pattern consists of several syntactic categories such as Noun (N), Preposition (Prep), Pronoun (Pro), Adjective (Adj), Article (Art), Tense-mark/Infinitival *to* (T) and Verb (V) with the lexical categories are V and Pro. The data with this kind of pattern are:

Table 4.10

|  |  |
| --- | --- |
| **No.** | **The Pattern of NP 🡪 N (PP)** |
| 1.2.3.4.5.6.7.8.9.10. | Vision of the Future From Those Likely to Invent ItVoices on Iraq’s Election DayObama on Foreign PolicyAftermath of Explosions in EgyptEchoes of History at a Tuscan EstateLessons in Catholic JudgmentFilly to Run in PreaknessMarlins’ Ace On Disabled ListVoices on Iraq’s Election DaySeparatist Vote in East Ukraine Is Chaotic and Condemned |

Here is the representative tree diagram of the data above.

 NP

 N PP

 Prep NP

 Art N PP

 Prep NP

 Pro Adj TP

 T VP

 V Pro

 Vision of the future from those likely to invent it

Phrase structure tree pattern.

NP 🡪 N PP

 PP 🡪 Prep NP

 NP 🡪 Art N PP

 PP 🡪 Prep NP

 NP 🡪 Pro Adj TP

 TP 🡪 T VP

 VP 🡪 V Pro

**2) The pattern of NP 🡪 (Adj) N (PP)**

This pattern presents an NP consists of adjective and noun as the subject that followed by a prepositional phrase. As an NP can consist of one of the three options of constituent as explained above, in this pattern, it consists of Adj, N and PP. This pattern consists of several syntactic categories such as Adjective (Adj), Noun (N), Preposition (Prep) and Proper Noun (PN) with the lexical categories are Prep and PN. The data with this kind of pattern are:

Table 4.11

|  |  |
| --- | --- |
| **No.** | **The Pattern of NP 🡪 (Adj) N (PP)** |
| 1.2.3.4.5. | Deadly Clash in BenghaziReal Goal of AbortionYoung Minds in Critical ConditionPossible Path to Closing Pay GapEpic Fails of the Start-Up World |

Here is the representative tree diagram of the data above.

 NP

 Adj N PP

 Prep NP

 Art N N

 Epic fails of the start-up world

Phrase structure tree pattern.

NP 🡪 (Adj) N (PP)

PP 🡪 Prep NP

NP 🡪 Art N N

**3)** **The pattern of NP 🡪 (Adj) N (TP)**

This pattern presents an NP consists of determiner and noun as the subject that followed by a Tense-mark/Infinitival *to* phrase (TP). As an NP can consist of one of the three options of constituent as explained above and what inside the bracket are optional, in this pattern, it consists of Adj, N and Tense-mark/Infinitival *to* phrase (TP). This pattern consists of several syntactic categories such as Adjective (Adj), Noun (N), Tense-mark/Infinitival *to* (T), Verb Phrase (VP), and Preposition (Prep) with the lexical categories are V, Prep and N. The data with this kind of pattern are:

Table 4.12

|  |  |
| --- | --- |
| **No.** | **The Pattern of NP 🡪 (Adj) N (TP)** |
| 1.2. | Alleged Plan to Provoke ProtestsDigital Music Service to Pose New Challenge to Subscription Model |

Here is the representative tree diagram of the data above.

 NP

Adj N N TP

 T VP

 V NP

 Adj N PP

 Prep N N

 Digital music service to pose new challenge to subscription model

Phrase structure tree pattern.

 NP 🡪 Adj N N TP

 TP 🡪 T VP

 VP 🡪 V NP

 NP 🡪 Adj N PP

 PP 🡪 Prep N N

**4) The pattern of NP 🡪 (Det) N (PP)**

This pattern presents an NP consists of determiner and noun as the subject that followed by a prepositional phrase. As an NP can consist of one of the three options of constituent as explained above and what inside the bracket are optional, in this pattern, it consists of Det, N and prepositional phrase (PP). Noun determiners appears in this pattern are also various such as determiner quantifier and determiner possessive pronoun/determiner person/people. This pattern consists of several syntactic categories such as Determiner (Det), Noun (N), Preposition (Prep), and Article (Art) with the lexical categories are Art, Prep and N. The data with this kind of pattern are:

Table 4.13

|  |  |
| --- | --- |
| **No.** | **The Pattern of NP 🡪 (Det) N (PP)** |
| 1.2. | More Acceptance for Transgender ModelsYour Building on an Index Card |

Here is the representative tree diagram of the data above.

 NP

 Det N PP

 Prep NP

 Art N N

 Your building on an index card

Phrase structure tree pattern.

NP 🡪 (Det) N PP

PP 🡪 Prep NP

NP 🡪 Art N N

**5) The pattern of NP 🡪 (Art) N (PP)**

This pattern presents an NP consists of determiner (article) and noun as the subject that followed by a prepositional phrase. Nouns preceded by article here are various such as common noun and abstract noun. This pattern consists of several syntactic categories such as Article (Art), Noun (N), Preposition (Prep), Proper Noun (PN) and Adjective (Adj) with the lexical categories are Art, Prep and PN and N. The data with this kind of pattern are:

Table 4.14

|  |  |
| --- | --- |
| **No.** | **NP 🡪 Art N PP** |
| 1.2.3.4.5.6.7.8.9.10.11.12.13.14.15.16.17.18. | The Doctor With a Razor Blade in IndiaA Culture of ViolenceA Soldier’s War on PainThe Rise of Antibiotic ResistanceThe Paradox of Art as WorkThe Time of the TummyThe Women of New York’s City HallThe Subcontinent in the Sunday Book ReviewA Memoir From the Eye of a Financial StormThe Morning Muse of TelevisionThe Problem With ConfidenceThe Benefits of Mixing Rich and PoorA Discussion of the Danger and Promise of TechThe Drawbacks of Puppy LoveThe Lives of Sociable SpidersThe Peril of Knowledge EverywhereStudy of Helmet TherapyA Night of Gospel, Spanning Generations |

Here is the representative tree diagram of the data above.

a) NP

 Art N PP

 Prep NP

 Art N N PP

 Prep PN

 The doctor with a razor blade in India

Phrase structure tree pattern.

NP 🡪 Art N PP

PP 🡪 Prep NP

NP 🡪 Art N N PP

PP 🡪 Prep PN

b) NP

 Art N PP

 Prep NP

 Art N PP

 Prep NP

 Art Adj N

 A memoir from the eye of a financial storm

Phrase structure tree pattern.

NP 🡪 Art N PP

PP 🡪 Prep NP

NP 🡪 Art N PP

PP 🡪 Prep NP

NP 🡪 Art Adj N

**6) The pattern of NP 🡪 (Art) (Adj) N (PP)**

This pattern presents an NP consists of article, adjective and noun as the subject that followed by a prepositional phrase. Nouns preceded by article and adjective here are kind of common noun, material noun and abstract noun. This pattern consists of several syntactic categories such as Article (Art), Noun (N), Preposition (Prep), Proper Noun (PN) and Adjective (Adj) with the lexical categories are Art, Prep and PN and N. The data with this kind of pattern are:

Table 4.15

|  |  |
| --- | --- |
| **No.** | **NP 🡪 (Art) (Adj) N (PP)** |
| a)b)c)d)e)f)g)h)i) | A Lucrative Market in MyanmarA New Resource for Buddhist ScholarsThe Toxic Brew in Our YardsThe Lasting Legacy of an Unwelcome PioneerA Long Way to Privacy SafeguardsA Working Vacation on an Umbrian FarmThe Dark Shadow of Agent OrangeA New Light on Dinosaurs’ Ability to HealA Closer Look Inside IBM's Cloud Challenge |

Here is the representative tree diagram of the data above.

a)NP

Art Adj N PP

 Prep NP

 Art Adj N

 A lasting legacy of an unwelcome pioneer

Phrase structure tree pattern.

NP 🡪 Art Adj N PP

PP 🡪 Prep NP

NP 🡪 Art Adj N

b) NP

 Art Adj N PP

 Prep Det N

 The toxic brew in our yard

Phrase structure tree pattern.

NP 🡪 Art Adj N PP

 PP 🡪 Prep Det N

**7) The pattern of NP 🡪 N (Adj) (N) (PP)**

This pattern presents an NP consists of noun with possessive inflection, adjective and noun as the subject that followed by a prepositional phrase. Nouns preceded by adjective here are kind of common noun and abstract noun. This pattern consists of several syntactic categories such as Noun (N), Adjective (Adj), Preposition (Prep), Proper Noun (PN) and Coordination (Coord) with the lexical categories are Prep, PN, Coord, Adj and N. The data with this kind of pattern are:

Table 4.16

|  |  |
| --- | --- |
| **No.** | **The pattern of NP 🡪 N (Adj) (N) (PP)** |
| 1.2. | Agent Orange’s Long Legacy, for Vietnam and VeteransTwitter's Top Lawyer as Defender of Free Internet Speech |

Here is the representative tree diagram of the data above.

 NP

 N Adj N PP

 Prep N PP’

 Prep NP

 Adj N N

Twitter’s top lawyer as defender of free internet speech

Phrase structure tree pattern.

NP 🡪 N (Adj) (N) (PP)

PP 🡪 Prep N PP’

PP’ 🡪 Prep NP

NP 🡪 Adj N N

**8) The pattern of NP 🡪 (Art) (Adj) (N) (N)**

This pattern presents an NP consists of article, adjective and noun. Nouns preceded by article and adjective here are common nouns. This pattern is not followed by a prepositional phrase. This pattern consists of several syntactic categories such as Article (Art), Adjective (Adj), Noun (N), and Proper Noun (PN) with the lexical categories are same consecutively. The data with this kind of pattern are:

Table 4.17

|  |  |
| --- | --- |
| **No.** | **The pattern of NP 🡪 (Art) (Adj) N (N)** |
| 1.2. | The Polarized CourtThe East China Sea Dispute |

Here is the representative tree diagram of the data above.

NP

 Art Adj PN N N

 The east China sea dispute

Phrase structure tree pattern.

NP 🡪 (Art) (Adj) N (N)

**9) The pattern of NP 🡪 (Adj) N (N)**

This pattern presents an NP consists of adjective and noun(s). Nouns preceded by adjective here are abstract noun. This pattern is not followed by a prepositional phrase. This pattern consists of several syntactic categories such as Adjective (Adj) and Noun (N). The data with this kind of pattern are:

Table 4.18

|  |  |
| --- | --- |
| **No.** | **The pattern of NP 🡪 (Adj) N (N)** |
| 1. | Crazy Climate Economics |

Here is the representative tree diagram of the data above.

NP

 Adj N N

 Crazy climate economics

Phrase structure tree pattern.

NP 🡪 (Adj) N (N)

**10) The pattern of NP 🡪 (Art) (Det) (Adj) N**

This pattern presents an NP consists of article, determiner, adjective and noun. This pattern consists of several syntactic categories such as Adjective (Adj), Noun (N), Tense-mark/Infinitival *to* (T), Verb (V) and Preposition (Prep). The data with this kind of pattern are:

Table 4.19

|  |  |
| --- | --- |
| **No.** | **The pattern of NP 🡪 (Art) (Det) (Adj) N** |
| 1. | A Very High-Flying Scotsman |

Here is the tree diagram of the data above.

NP

 Art Det Adj N

 A very high-flying Scotsman

Phrase structure tree pattern.

NP 🡪 (Art) (Det) (Adj) N

**11) The pattern of NP 🡪 N S**

This pattern presents an NP consists of noun and a sentence of relative clause that also known as adjective clause or relative pronoun referring to the noun. This pattern consists of several syntactic categories such as Noun (N), Pronoun (Pro), Verb(V), Preposition (Prep), Article (Art) and Adjective (Adj) with the lexical categories are Art, Adj and N. The headline with this kind of pattern is:

Table 4.20

|  |  |
| --- | --- |
| **No.** | **The pattern of NP 🡪 N (Pro) (VP)** |
| 1.2. | Spiders That Thrive in a Social WebMost Who Signed Up for Health Care Have Paid Up |

Here is the tree diagram of the data above.

NP

 N S

 NP VP

 Pro V PP

 Prep NP

 Art Adj N

 Spiders that thrive in a social web

Phrase structure tree pattern.

NP 🡪 N S

S 🡪 NP VP

VP 🡪 V PP

PP 🡪 Prep NP

NP 🡪 Art Adj N

**12) The pattern of NP 🡪 Art N PP (NP’)**

This pattern presents an NP consists of article, noun, prepositional phrase and an NP’ (NP-bar). Noun preceded by article here followed by a PP. This pattern consists of several syntactic categories such as Article (Art), Noun (N), Preposition (Prep), Pronoun (Pro), Verb (V) and Determiner (Det) with the lexical categories are Det and N. The headline with this kind of pattern is:

Table 4.21

|  |  |
| --- | --- |
| **No.** | **The pattern of NP 🡪 ART N PP (NP’)** |
| 1. | The Move Toward Computing That Reads Your Mind |

Here is the tree diagram of the headline above.

 NP

Art N PP NP’

 Prep N Pro VP

 V NP

 Det N

The move toward computing that reads your mind

Phrase structure tree pattern.

NP 🡪 Art N PP NP’

PP 🡪 Prep N

NP’ 🡪 Pro VP

VP 🡪 V NP

NP 🡪 Det N

**13) The pattern of NP 🡪 N (Adj) (Adj)**

This pattern presents an NP consists of noun followed by adjectives. This pattern consists of two kinds of syntactic categories. They are noun (N) and adjective (Adj) which are also as the lexical categories. The headline with this kind of pattern is:

Table 4.22

|  |  |
| --- | --- |
| **No.** | **The pattern of NP 🡪 N (Adj) (Adj)** |
| 1. | Why Economics Failed |

Here is the tree diagram of the headline above.

 NP

 N Adj Adj

 Why Economics Failed

Phrase structure tree pattern.

NP 🡪 N (Adj) (Adj)

**14) The pattern of NP 🡪 N (Aux) (N) (PP)**

The pattern above means that the certain headline consists of noun phrase followed by an auxiliary and other noun, and a prepositioanl phrase. As the very base of an NP consists of a noun, in this kind of pattern the first noun phrase we have here is a proper noun. The pattern above consists of several syntactic categories such as Proper Noun (PN), Proper Noun (PN), Auxiliary (Aux), Noun (N), and Preposition (Prep).. Here is the datum with this kind of pattern.

Table 4.23

|  |  |
| --- | --- |
| **No.** | **The pattern of NP 🡪 N (Aux) (N) (PP)** |
| 1. | Americans Are Outliers in Views on Climate Change |

Here is the tree diagram of the pattern above.

 NP

 N Aux N PP

 PN Prep N PP

 Prep NP

 N N

 Americans Are Outliers in Views on Climate Change

The phrase structure tree.

NP 🡪 N (Aux) (N) (PP)

**15) The pattern of NP 🡪 N (Aux) (Adj)**

The pattern above means that the certain headline consists of noun phrase followed by an auxiliary and an adjective. As the very base of an NP consists of a noun, in this kind of pattern the first noun phrase we have here is an abstract noun as well as proper noun. The pattern above consists of several syntactic categories such as Noun (N), Auxiliary (Aux), and Adjective (Adj) which are also as the lexical categories.

Table 4.24

|  |  |
| --- | --- |
| **No.** | **The pattern of NP 🡪 N (Aux) (Adj)** |
| 1.2.  | Inequality Is Not InevitableProfessors Are Prejudiced, Too  |

Here is the tree diagram of the pattern above.

 NP

 N Aux Adj

 Inequality Is Not Inevitable

The phrase structure tree.

NP 🡪 N (Aux) (Adj)

**16) The pattern of NP 🡪 N (NP)**

The pattern above means that the certain headlines consist of noun phrase followed by another noun phrase. As the very base of an NP consists of a noun, in this kind of pattern the first noun phrase we have here is a proper noun. The pattern above consists of several syntactic categories such as Preposition (Prep), Proper Noun (PN), Determiner (Det), Noun (N), and Adjective (Adj). The data with that kind of pattern are:

Table 4.25

|  |  |
| --- | --- |
| **No.** | **The pattern of NP 🡪 N (NP)** |
| 1.2.3. | Priyanka Chopra: The New Face of GuessSports, the Most Progressive Force in AmericaEuropean Jobs Market Still Stagnant, March Data Show |

Here is the tree diagram of the pattern above.

 NP

 N NP

 PN Art Adj N PP

 Prep N

 Priyanka Chopra the new face of guess

The phrase structure tree.

S 🡪 NP NP

NP 🡪 PN

NP 🡪 Art Adj N PP

PP 🡪 Prep N

**17) The pattern of NP 🡪 NP1 (Coord) (NP2)**

The pattern above means that the certain headlines consist of two noun phrases connected by a coordinator. The pattern above consists of several syntactic categories such as Preposition (Prep), Proper Noun (PN), Determiner (Det), Noun (N), and Adjective (Adj). The data with that kind of pattern are:

Table 4.26

|  |  |
| --- | --- |
| **No.** | **The pattern of NP 🡪 NP1 (Coord) (NP2)** |
| 1.2.3. | A Birdbath-Size Hole and the Future of GolfA Heinous Crime, Secret Histories and a Sinn Fein Leader’s ArrestHurt Before the Birth |

Here is the representative tree diagram of the pattern above.

 NP

 NP1 NP2

 Art Adj N Coord Art N PP

 Prep N

 A birthbath-size hole and the future of golf

The phrase structure tree.

NP 🡪 NP1 (Coord) (NP2)

NP1 🡪 Art Adj N

NP2 🡪 Art N PP

PP 🡪 Prep N

**d. The pattern of PP**

 The pattern above means that the certain headlines are in form of prepositional phrase followed by a certain phrase. The variation as followed:

**1) The pattern of PP 🡪 Prep NP**

This pattern explains that a prepositional phrase consists of a preposition (Prep) that followed by a noun phrase (NP). A preposition is a word that links and relates a noun or pronoun to another word. Every PP consists of a preposition (Prep) and a noun phrase (NP). This pattern consists of several syntactic categories such as Noun (N), Preposition (Prep), Pronoun (Pro), Adjective (Adj), Article (Art), Tense-mark/Infinitival *to* (T) and Verb (V) with the lexical categories are V and Pro. The data with this kind of pattern are:

Table 4.27

|  |  |
| --- | --- |
| **No.** | **The pattern of PP 🡪 Prep NP** |
| 1.2. | With Malice Toward NunsIn a Blaze of Confusion |

Here is the tree diagram of the headline above.

 PP

Prep NP

 Art N PP

 Prep N

In a blaze of confusion

 The phrase structure patterns.

 PP 🡪 Prep NP

 NP 🡪 Art N PP

 PP 🡪 Prep N

**2) The pattern of PP 🡪 Prep (S)**

This pattern shows that a PP consists of a prepotition and another sentence. The data with this kind of pattern are.

Table 4.28

|  |  |
| --- | --- |
| **No.** | **The pattern of PP 🡪 Prep (NP) (S)** |
| 1.2.3. | In Historic Pick, Rams Take Michael Sam in Final Round of DraftIn Paris, Benjamin Millepied Rises to the OccasionAt Christie’s Auction, an Experiment Proves Fruitful |

Here is the tree diagram.

 PP

Prep NP S

 PN NP VP

 PN V NP

 PN PP

 Prep NP

Adj N PP

 Prep N

 In historic pick, Rams take Michael Sam in final round of draft

The phrase structure patterns.

PP 🡪 Prep NP S

S 🡪 NP VP

VP 🡪 V NP

NP 🡪 PN PP

PP 🡪 Prep NP

NP 🡪 Adj N PP

PP 🡪 Prep N

**3) The pattern of PP 🡪 Prep NP (VP)**

This pattern shows a PP that consists of Prep and VP. The data with this kind of pattern is:

Table 4.29

|  |  |
| --- | --- |
| **No.** | **The pattern of PP 🡪 Prep (NP1) (NP2)** |
| 1. | In Rwanda, Finding Echoes of Germany |

The tree diagram of the headline above is below.

 PP

 Prep NP1 NP2

 PN N NP’

 N PP

 Prep N

 In Rwanda, finding echoes of Germany

The phrase structure patterns.

PP 🡪 Prep (NP1) (NP2) NP’ 🡪 N PP

NP1 🡪 PN PP 🡪 Prep N

NP2 🡪 N NP’

**2. Frequency and Percentage**

In this session, the researcher presents the results of rating the types of structure patterns in the form of frequency and percentage.

Table 4.30

 **Types of patterns occurred in The New York Times Article Headline in the First Two Weeks of May 2014 (May 1st until 14th)**

|  |  |  |
| --- | --- | --- |
| **Types of Pattern** | **Frequency** | **Percentage** |
| a. Pattern of S1. S 🡪 NP VP2. S 🡪 VP S’3. S 🡪 NP (Aux) VP4. S1 🡪 Coord S2 S35. S 🡪 NP Adv VP6. S1 🡪 S2 Coord S3b. Pattern of VP1. VP 🡪 V (NP)2. VP 🡪 V (TP)3. VP 🡪 V (PP)c. Pattern of NP1. NP 🡪 N (PP)2. NP 🡪 (Adj) N (PP)3. NP 🡪(Adj) N (TP)4. NP 🡪 (Det) N (PP)5. NP 🡪 (Art) N (PP)6. NP 🡪 (Art) (Adj) N (PP)7. NP 🡪 N (Adj) (N) (PP)8. NP 🡪 (Art) (Adj) N (N)9. NP 🡪 (Adj) N (N)10. NP 🡪 (Art) (Det) (Adj) N11. NP 🡪 N S12. NP 🡪 (Art) N (PP) (NP’)13. NP 🡪 N (Adj) (Adj)14. NP 🡪 N (Aux) (N) (PP)15. NP 🡪 N (Aux) (Adj)16. NP 🡪 N (NP’)17. NP 🡪 NP1 (Coord) (NP2)d. Pattern of PP1. PP 🡪 Prep NP2. PP 🡪 Prep NP (S)3. PP 🡪 Prep NP1 (NP2)Total | 833102346111352218922113111237231192 | 43,2%1,5%5,2%1,0%1,5%2,0%3,1%0,5%0,5%6,7%2,6%1,0%1,0%9,3%4,6%1,0%1,0%0,5%0,5%1,5%0,5%0,5%0,5%1,0%1,5%3,6%1,0%1,5%0,5%100% |

From the table above the researcher finds that the most frequent phrase structure pattern occurred on the headlines in *The New York Times* in the first two weeks of May was the pattern of S 🡪 NP VP. This type of pattern was found 83 times among 192 total of headlines analyzed by the researcher with the percentage of 43%. The next type of phrase structure tree was NP 🡪 (Art) N (PP) that occurred with 18 occurrances and percentage of 9,4%. The third type of phrase structure occurred was NP 🡪 N (PP) with 13 occurrances and percentage of 6,8%. Next was the pattern of S 🡪 NP (Aux) VP happened to be the fourth type of pattern with 10 occurrances and percentage of 5%. Other types of phrase structure occurred were below 10 occurrances with the percentage below 5% among the total percentage. The least patterns occurr are the pattern of VP 🡪 V (TP), VP 🡪 V (PP), NP 🡪 (Adj) N (N), NP 🡪 (Art) (Det) (Adj) N, and PP 🡪 Prep NP (VP) with only one occurrance of each and percentage of 0,5%.

**B. Discussion**

Discussion below will discuss the types of sentence patterns, based on phrase structure rule, occurred on the headlines in *The New York Times* in the first two weeks of May 2014 (May 1st until May 14th).

1. The pattern of S

In ordinary sentences, the S is always subdivided into NP VP (Fromkin, 1983). However, while the researcher analyzing the data, when she look at other phrase structure trees of English, she saw certain patterns emerging. As in the pattern of S itself, the researcher found 6 types of pattern. Among these 6 types of pattern, the researcher found that the most frequent phrase structure pattern occurred on the headlines in *The New York Times* was the pattern of S 🡪 NP VP. This pattern happened to be the most used by the writers of *The New York Times* which found 83 times of occurance with the highest percentage of 43,2% (see table 4.30). The 5 other types were used by other writers which the researcher considered rare since the percentage of occurance of every pattern was below 10%.

1. The pattern of VP

The second pattern occurred on the headlines in *New York Times* online newspaper found by the researcher was the pattern of VP (Verb Phrase). VPs always contain Verb (Fromkin, 1983) which followed by other constituents such as NP or PP. A VP may or may not include an NP or a PP but it must always contain a Verb. The researcher found this kind of phrase was also considered rare because the percentage of occurrance was below 10% out of the total headlines analyzed. The researcher found 3 types of this pattern which was the most used by writer was the pattern of VP 🡪 V (NP) with 3,1% of occurrance.

1. The pattern of NP

The only constituent required in each NP phrase-structure rule is N; the other constituents --- DET, ADJ and PP --- are optional and must be placed in parentheses (Edward, 2000). Because DET, ADJ and PP are each optional, we can rewrite NP in many variation of patterns as the researcher found in the headlines. This kind of pattern had the most type with 17 types based on the researcher analysis. The pattern which had the highest percentage among 17 types of NP pattern was the pattern of NP 🡪 (Art) N (PP) which happened 18 times with 9,3% percentage. The second type of pattern was the pattern of NP 🡪 N (PP) with 6,7% and 13 times occurance. The 15 others type were considered rare which only happened below 10% out of the total percentage.

1. The pattern of PP

PPs always consisted of a Preposition (Fromkin, 1983). According to those rules, other possibilities are optional. The researcher found 3 types of pattern of PP. Each of the patterns was followed by NP. These 3 types of pattern were, also like the 2 other types of pattern above, considered rare with only 1 to 3 times occurances and a low percentage between 0,5% to 1,5%. They were the pattern of PP 🡪 Prep NP, PP 🡪 Prep NP (S) and PP 🡪 Prep NP (VP).