

Preverbal Subjects in Makkan Arabic: A feature-inheritance approach

by

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A Thesis submitted to the Faculty of Graduate Studies of
The University of Manitoba in partial fulfillment
of the requirements for the degree of

Doctor of Philosophy

Department of Linguistics
University of Manitoba
Winnipeg

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Abstract

This dissertation argues that not all preverbal nominals in Arabic are instances of left-dislocation/topicalization but that some can occupy preverbal subject positions. It explores three types of predications that follow preverbal subjects: verbal predicates, copular predicates and sentential predicates. I propose that in all sentence types, preverbal subjects are derived by movement from lower subject and non-subject positions to the specifier of the Subject of Predication (SubjP) projection to satisfy the Subject of Predication (SoP) feature (Cardinaletti, 1997, 2004). Based on the feature-inheritance approach (Chomsky 2000, 2001, 2005) in which movement is only motivated by edge features (e.g., EPP), I propose that SoP is an edge feature that motivates movement in Makkan Arabic, and that the EPP feature in Arabic is rather satisfied by verb movement to the head T. The preverbal subject position [Spec, SubjP] position is recursive as it can optionally attract any definite nominal in the clause that bears the interpretable iSoP whether it is a thematic subject, object, object of preposition or possessor inside a DP. Thematic subjects undergo successive movement to [Spec, SubjP] passing through [Spec, AspP] and [Spec, TP] which are blocked for non-nominative nominals. When more than one nominal undergoes movement to [Spec, SubjP], the Shortest Move principle applies so that the highest nominal moves first, and the landing site is the closest [Spec, SubjP] position. I adopt the Copy Theory of Movement, in which movement entails making copies of the moved elements in the new positions, thus creating a movement chain. The successive movement of thematic subjects that bear the nominative Case leaves copies in [Spec, vP], [Spec, AspP] and [Spec, TP], one of which can optionally be spelled out in addition to the head of the chain (Halle and Marantz 1993, 1994). When non-subject nominals undergo movement to the SubjP projection, the head of the chain gets its original Case overridden and receives nominative Case. The copy at the tail of the chain obligatorily spells out in the form of a resumptive pronoun bearing accusative or genitive Case because these copies are marked as distinct by the operation of Copy.

Acknowledgments

I have imagined the day when I would sit down to write my acknowledgment so many times during the last six years. Whenever I felt too discouraged to get up and keep going and whenever the end of the tunnel seemed too far away, I would assure myself that this long-awaited day was coming. Over the years, I made many promises to myself that this part of my dissertation would be more of personal love letters to all the people that contributed to this overwhelming journey. Undoubtedly, I am immensely grateful for the Saudi Cultural Bureau in Canada and for the Saudi Ministry of Education as well as Umm Al-Qura University for funding my graduate studies during the last eight years. As time goes by, I become an increasingly proud Saudi citizen who dreams of paying back the debt by loyally serving my country and my government.

I am hugely indebted to my supervisor Dr. Jila Ghomeshi. Frankly, I always wondered why graduate students dedicate so much of their acknowledgment to their supervisors when it was the students themselves who did the work. Now I know why, and I know that I can go on for pages without completely expressing my deep gratitude, but I will try. Dr. Jila, I can still remember knocking on your door eight years ago and being anxious to meet my supervisor. In no time at all, you made me feel warm and welcomed. I learned a lot from you, in all your classes, during our meetings and even from the quick talks with you in the hallway. You were always patient, encouraging, humble and kind-hearted. I learned from you that being passionate about what I do is the secret to success, and that trust is the essence of the relationship between graduate students and their supervisors. I was extremely lucky and truly blessed to write my MA thesis then PhD dissertation under your supervision. Every time I got lost, you would guide me with your sharp vision and wide breadth of knowledge. Every time I felt down or defeated, you would motivate me and always knew how to push me to get the best out of me. Every time I achieved a significant milestone, you were there cheering me on, like a mother to her child. You gave me an ideal representation of what a teacher, supervisor and scholar should be. Thank you now and always. Thank from the bottom of my heart.

I am also thankful to the members of my committee, Dr. Will Oxford, Dr. Terry Janzen and Dr. Hamid Ouali. Thank you for your valuable contributions to enhance my work and for your priceless comments that you provided in your feedback reports.

Dr. Hamid Ouali, your wide knowledge of syntax and experience in Arabic have enriched my understanding of the topic in many ways. I am also truly grateful for your friendly presence at the oral defence. I was dreading the oral defense for months, especially with the unknown of the external examiner, but then you helped turning the experience into a beautiful memory.

Dr. Terry Janzen, you were the first person I met on my very first day at the university, and unsurprisingly you were so welcoming and assuring. After attending a few classes with you, I started growing a deep interest in pragmatics and discourse analysis, and I was always eager to learn more about your perspectives in linguistics. On another level, as a person who gets easily stressed, I always associated being academically productive with living under pressure and constantly being in a hurry. You proved me wrong as I learned from you that working on numerous projects should not stop me from peacefully enjoying what I do. There is indeed contagious peace wherever you are present. It inspires me to be this type of person one day, a

person who magically makes great achievements look smooth and manageable. I am very thankful to have been your student.

Dr. Will Oxford, thank you for helping me explore the topic of this dissertation while supervising my second general paper. Your guidance helped me turn one random thought into an actual well-constructed paper and then directed me to expand my paper into a dissertation. I appreciate the time, knowledge and effort that you invested in this work. During my second year in the master program, I heard that we were going to be taught by a genius in linguistics. After attending a couple of your classes, I was sure that what I heard about you was a hundred percent accurate. Other than being a smart and hard-working scholar, you are indeed a perfect teacher. You easily reach students' minds and gradually build their knowledge and confidence. I really enjoy learning anything the way you teach it; it simply makes more sense when I hear it from you. I consider myself lucky to have been your student, and I will do my best to model what I learned from you for my future students.

I actually learned a lot from all my teachers in the department of linguistics to whom I am truly thankful, especially Dr. Verónica Loureiro-Rodríguez. Every time I saw you walking around, I would see a motivating energy embodied in a person. You taught me that I can learn a lot in a 40-minute class, and that I can read more in one week than I thought I can read in a whole month. You taught me that one important secret of productivity is successful time management. I loved coming to you to help me set up realistic deadlines throughout my graduate studies. I loved visiting with you not only as a teacher but also as a friend. You motivated me to achieve one of my childhood dreams which was to learn Spanish. Most of all, I will miss hearing your contagious laughter. For all of these memories and many more, I am truly thankful.

Of course, I can never forget our beautiful administrator, Heather Cherpako. Thank you for helping me work through all the administrative headaches along the way. You never hesitated to help me even when it meant taking countless trips to the copy room for my sake. I will miss our warm morning chats.

During my graduate studies at the University of Manitoba, I made a lot of close friends in the linguistics department. My office buddy Marzieh Hadei, thank you for all our talks during breaks in the office and for sharing snacks and coffee with me. I used to look forward to our special lunch dates which were always rewarding after putting in hard work. I am sorry we missed our biggest lunch date, celebrating our graduations and saying a proper goodbye. Precious Affia, I really enjoyed getting to know you, and I will always remember you and pray for you. I am thankful to all my colleagues at the linguistics department, Vivian, Lanlan, Gabriel, Hai, Christina, Maria, Trevor, Kuntala and many more. Special thanks to my first colleague and friend Anna Parenteau and also Kathleen Strader.

If there is one life-lesson I learned from being in Canada for all those years, it will be deeply cherishing friendship and realizing the real value of true friends. My dearest friend and first neighbor Camile Desharnais, I am immeasurably thankful to have met you. I can clearly remember the first time I met you, walking back home after an exhausting day at the university, I saw you waving to me from your window with a wide cheerful smile. You then ran out with your friendly kids to welcome your new neighbor; it was on that beautiful day that our story began. I am deeply grateful for everything we did together, our walks in the Greenway, our countless

trips to Tim Hortons, cooking together, the big bags of tortilla chips that I always dug for in your pantry and definitely all our long heart-to-heart therapeutic talks. You understand my words in the same way as you understand my silence. It is very hard for me to believe that we are actually living very far away from each other when you are this close to my heart, mind and soul. As I always tell you, leaving Canada was only the end of the first chapter but not the end of the story. I am thankful for all your family as well, especially my dear Esthie (Halimah's Canadian twin). Having you around was always a joy to me and my family.

My lovely neighbors John and Barbra Little, thank you for your kindness from the first day until now. Barbara, thank you for all the delicious dinners you used to invite us to in your cozy place. Mr. John, thank you for supporting me and my family whenever we needed. Thank you for your fatherly care and for asking about us constantly. I truly appreciate you.

The most special teacher in the best home daycare, Manjeet Sidhu, you are an angel who made my life in Canada bearable. After failing repeatedly to find a safe place for my son, I walked to your house without much hope. However, in your warm home and among your loving family, we found a safe haven for me and my son. This gave me the peace of mind and soul that I needed to be able to do schoolwork and to move forward with my life. I am deeply thankful for all your love, kindness and support.

Departing my home country Saudi Arabia was challenging, but the small Saudi community that I strongly bonded with in Winnipeg made all the difference. When one is away from home and family, friends become family. I am immensely thankful for all my Saudi friends whom I got to know in Canada. Thank you all for your generosity and for the effort you made so we could gather and have fun. Thanks to you, my family was not alienated from our cultural and religious traditions, language, delicious food, coffee and all our special occasions.

My friend and my sister Hanadi Azhari, I am grateful that I always felt like a part of your family. With you, I experienced friendship in its most deep and truthful levels. I appreciated how spontaneous and honest you always were. We went through countless ups and downs, but you never gave up on me as a friend and as a sister. I loved that we originally came from the same place, studied in the same field, worked under the same supervisor and are currently employed by the same university. When it comes to you, I have a treasure box that is loaded with happy memories. You have seen me in every state, when I was weak, happy, sad, disappointed and excited. When you left Canada, it was hard because I knew I would not run into you by chance anymore, but my only consolation was that we will be together when I returned. You are a blessing to my life that I pray I will never have to live without.

I am also thankful for all my other Saudi friends. My neighbor Eman Al-Balawi, I really enjoyed being your neighbor for five years. I loved our unplanned late-night visits, and how our kids got so attached to each other. I will always remember how you used to leave stuff and food for me hanging on my door. It made me feel loved and remembered. Abrar Al-Hindi, I did not know you for long, but you quickly made your way into my heart. We were neighbors for a short time, but the ties we made are deep and strong. Despite all life's hardships, you are still an innocent loving child from within. Abeer Alamri, it was always very rewarding for me to visit with you at any time we could steal away from our busy lives. I loved how much you always cared about me and encouraged me to come to any gatherings you attended; it made me feel very

special and loved. I cannot be more grateful for getting to know you and for our friendship. Eman Alraddadi, I am so grateful we grew very close when our sons became good friends at the daycare. Thank you for being the authentic person you are, I really appreciate you. Thank you to all my other loving wonderful Saudi friends throughout the years in Canada, Reem Al-Rishidan, Rana Alnoori, Bushra Sami, Hadeel Taleb, Nora Ghazzawi, Shaza Alattar, Lojeen Ayob, Abrar Althaqafi, Lina Alqublan and many more.

I am also thankful for my undergraduate supervisors and teachers in the English department at Umm Al-Qura University, Dr. Shirley Cole and Dr. Mahasen Abu-Mansour. You planted the first seeds of knowledge for me as a student in the English department. With your patience and encouragement, I grew a huge passion for the field of linguistics. Dr. Mahasen, I appreciate all the love and care that you always provided which continued throughout my time in Canada. Dr. Shirley, thank you for always encouraging me to move forward. You were the one who motivated me to apply for the TA position even when I thought I had no chance of pursuing higher education. Thank you for all my teachers in the English department who pushed me to learn and exceed my limits, Dr. Zubaidah Eriksosi, Dr. Kholoud Al-Thobaiti, Dr. Rawiah Kabrah, Mrs Tahani Basnawi, Dr. Jamal Shishah, Dr. Anas Abu-Mansour and so many more.

My friends in Umm Al-Qura University, I am happy to be back, and I am looking forward to spending more time with you all. Najlaa Al-Blaimi, I cannot imagine coming home every year in the last eight years without visiting you. For me, you are an integral part of what home looks like for me. Asma Mukhtar, you are beautiful person inside and out, so easy for everybody to love. Thank you for being you. Dr. Nawal Al-Zahrani, I believe that our friendship is the oldest (20 years now!!), and I cannot be prouder of that fact. We were colleagues in our undergraduate studies, and we grew a very special and strong friendship over the years. Dr. Honaidah Ahyad, the days in which we used to share the same desk in Umm Al-Qura university were unforgettable. I know that we made many promises back then that one day we would come back to be office buddies, but it was destined that we take different roads. I am happy for you, and I know that our roads will cross somehow one day. I always pray for you. Dr. Neveen Abdulhai, I enjoyed having you in Winnipeg for a while, and thank you for being a trusted person to whom I could turn to for advice. Dr. Sameera Allihibi, thank you for being the one who checks in on me; I appreciate your kindness and concern. Dr. Jumana Abusulaiman, thank you for your encouraging texts and for all the energy I received from your heartfelt words. Thank you to all my other friends at UQU, Mrs. Noha Bajouda, Dr. Deema Abduljabar, Ms. Halah Al-Hitarshi, and many more.

Saving the best for last, I would love to express my deepest gratitude to my family, especially and most importantly my mother Eman Halawani and my father Omar Makkawi. Every year when my vacation back home ends, and it would be time to travel back to Canada, my heart ached. Being apart from you was one of the most painful things that I had to deal with during my studies abroad. I am so grateful to have you in my life and want to thank you for all your prayers and support. I am the person that I am today because of you and the values you instilled in me. Dad, when I was a little child, you always talked to me like an adult. You taught me to take pride in my values even if they were different from others. You taught me to be strong and courageous, to swim against the stream and to never give up. It brings me to tears every time you tell me how proud you are of me. Mom, you taught me to give and to give from the heart

without expecting anything in return. You taught me how to love unconditionally and to be kind even when people mistreat me. You taught me to be a contented person finding happiness in the smallest details around me. I found joy when I came back to your warmth. I missed having you take care of me like you did when I was little. Being close to you and sharing your special tea makes up for all the hard days that I lived away from you. My mother-in-law, Majdah, thank you for all your love and prayers. My stepmother Huda, thank you for your encouragement especially when it felt that I had nobody on my side.

My brother and my childhood friend, Dr. Seraj Makkawi, you are the best brother any girl could ever dream of. I appreciate all the memories we made when we were so young living under the same roof. While in Canada, you were a huge support in spite of your extremely busy life in another city. I can still visualize my first night in Canada; I woke up in a strange place where nothing felt, looked or sounded familiar, nothing but your voice when you called me at our hotel. The place suddenly felt safe because you were there. When you left Canada seven years later, it was hard for me to bear; the place felt strange and lonely all over again without you. Thank you for your genuine brotherly care, you never stopped supporting me, and I cannot be more grateful. Thank you for being present with me when my two children were born and for phoning me regularly to check on me and my family. My beautiful sister-in-law, Dania, my brother is lucky to have you by his side. You are the heavenly reward for all his good deeds, and I truly love you as family.

My wonderful brother, Eng. Mohammad Makkawi, you are always ready to help; thank you for your financial, technical and emotional support. I really appreciate you, your transparent personality, spirit and wisdom. My beautiful sister-in law, Khadija, the closer we get, the more I realize what a knowledgeable and warm-hearted person you are.

My youngest siblings, Fatima, Noor, Halimah, Abdullah and Hayat, I left to Canada when you were really young. I am sorry that I did not get to be around to see you grow up. My first sister Fatima, you always seem older than you are. I always love having deep talks with you and feel privileged that you share your thoughts with me even while I was away. My amazing sister Noor, you have such a pure loving heart, and I cannot help but notice how helpful and caring you are with the people around you. Thank you for helping me set up a perfect atmosphere for my online PhD defense. My cute little sister Hayat, thank you for being a genuine friend for my daughter in addition to being the perfect auntie, you are the joy of the house. My lovely brother, Abdullah, thank you for your love, respect and generosity. I so appreciate the times you take me around in your car and buy me coffee. It is always a pleasure to have you around.

My daughter-like sister Halimah, thank you for all your support during the last few years. Thank you for loving my kids unconditionally and for continually investing in them. Thank you for sharing all the details of my life (even the boring ones) and for the long video calls that helped me get through my difficult days. Thank you for the muted video calls when I did not want to sit and work on my research alone. Thank you for being my “halal music” keeping me company when I did not feel like doing house chores. Thank you for virtually accompanying me on my way home, on grocery shopping trips and during my morning routine on campus while getting my day started. Thank you for our long chats late at night when I was too stressed to

sleep. You proved to me that a person does not need to be physically present in the lives of the people they love to be genuinely and significantly present in their lives.

My soulmate and love of my life, my husband Mohammad Al-Yamani, I found life when I found you. You are God's gift that enlightens my world. You are the hope that I wake up to every morning which empowers me to give my best and enjoy life to the maximum. Thank you for motivating me not only to work hard to fulfil my dreams, but also to live for myself not only for my family. Thank you for being on my side, for patiently tolerating all my study-related drama and all the repeated complaints about time pressures and kid responsibilities. Thank you for all your sacrifices, for putting your own life on hold for eight years during my scholarship in Canada. I learned with you that love has so many forms, and that true partners can play many different roles in each other's lives. I love to see life through your eyes, and I take pride in all the details of our story together. I am lucky to be your wife, and I want nothing more than to grow old with you surrounded by our lovely children.

My children Nada and Saleh, you are the only ones whom I feel that I need to apologize to as well as thank. Completing my graduate studies in Canada might have distracted me from spending more time with you, but I believe that we had a unique chance to bond as a family. I love all the memories we made and the people you are becoming. I truly enjoyed everything we did together like going to the mall, having a meal at McDonalds, watching a movie, playing our favorite songs while driving, walking to 7-Eleven for snacks or even taking the garbage outside and goofing around by our building. My precious princess Nado, I am so proud of the smart beautiful lady you are turning out to be; you easily mastered two languages, and I cannot even remember when or how you learned to perfectly read and write. I love how creative you are with everything you do, and I enjoy all types of verbal communication with you, from listening to your stories after schools to our meaningful talks before bedtime. My handsome little guy Saloh, although it was not easy taking care of you as a baby who wanted to be held all the time and barely slept at night, I really love the strong bonds that we grew. I loved that you would come look for me no matter what you were doing, like watching a movie or playing with your favorite toy, only to have a kiss or a hug. You could get me upset with you, then a second later get me to be hilariously laughing at you. I have enjoyed watching you become so strong and independent, seeing you insist on helping empty the laundry basket, pouring yourself milk or grabbing some bread to eat. I love you both my beautiful children more than words can say. I dedicate this dissertation to you my small family, Mohammad, Nada and Saleh.

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Abbreviations and Transcription Conventions

List of Abbreviations

The following list includes the abbreviations used in glosses throughout the dissertation:

1, 2 and 3	First, Second and Third person, respectively
sg and pl	Singular and Plural, respectively
m and f	Masculine and Feminine, respectively
perf	Perfective Verb Form
imperf	Imperfective Verb Form
NOM	Nominative case marker
ACC	Accusative case marker
NEG	Negation particle
NSL	Null-Subject Languages
DPS	Double Preverbal Subject constructions
SoP	Subject of Predication feature
SubjP	Subject of Predication projection
SVO	Subject-Verb-Object word order
VSO	Verb-Subject-Object

In citing data from other references, I adapt the examples to conform to the conventions I follow in this dissertation but do not add any information that is not in the source.

Notes on transcription

Following are the phonetic symbols used in transcribing the data in the present study. All other symbols not mentioned in this table are standard IPA symbols.

Symbol	Phonetic description
ʔ	Voiceless glottal stop
g	Voiced velar stop
ʃ	Voiceless postalveolar fricative
ʕ	Voiced pharyngeal fricative
ħ	Voiceless pharyngeal fricative
ʂ	Voiceless alveolar fricative
ʈ	Voiceless alveolar plosive
x	Voiceless velar fricative
ɣ	Voiced velar fricative
ɖ	Voiced velarized alveolar plosive
ð	Voiced interdental fricative

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Chapter 1

Introduction

1.1 Introduction

One intriguing fact about all Arabic varieties, including Standard Arabic, is that both VSO and SVO word orders are allowed in simple finite sentences.¹ The following examples are from Makkan Arabic, a modern urban dialect spoken in the city of Makkah, in the western region of Saudi Arabia. It is the variety under study in this dissertation.² In (1), the subject *al-bent* ‘the girl’ can occur in a preverbal position (1a) or a postverbal position (1b).

- (1) a. **al-bent** raḥ-at al-ḥafl-a
the-girl.sg go.perf-3.sg.f the-party-sg.f
‘The girl attended the party.’
- b. raḥ-at **al-bent** al-ḥafl-a
go.perf-3.sg.f the-girl.sg the-party-sg.f
‘The girl attended the party.’

Makkan Arabic, and other Arabic dialects along with Standard Arabic, also allows subjects to be null pronouns; these pronouns are not phonologically realized but can be recovered from the agreement on the verb, as shown in (2). Because of this, Arabic is classified as a null-subject language (NSL). By contrast, languages like English do not allow null subjects, nor do they allow subjects to appear in a postverbal position, as illustrated in (3).

¹ Standard Arabic is the formal, mostly written, language shared between all Arabic-speaking countries.

Additionally, there are many colloquial urban and tribal dialects in each country that are used in conversations and informal speech.

² I am a native speaker of Makkan Arabic, and all unattributed examples are my own. See section 1.3 for a detailed discussion on Makkan Arabic. The abbreviations that I use throughout the dissertation appear in the list of abbreviations on page (viii).

- (2) raḥ-at al-ḥafl-a
 go.perf-3.sg.f the-party-sg.f
 ‘(She) attended the party.’
- (3) a. The girl attended the party.
 b. *attended the girl the party.
 c. *attended the party.

Although nominals in Arabic, such as *the girl* in (1), can appear in preverbal and postverbal positions, there is disagreement in the literature regarding the status of preverbal nominals in Arabic. This disagreement started in the eighth century between two traditional schools of Arabic grammar, namely the Basran and Kufi school (Eid 1975; Hassan 1975; Al-Makhzomi 1986, Al-Samurra’i 2001, Al-Kawari 2008). The followers of the Basran school consider preverbal nominals to be topics (*mubtadaʔ*) that are co-indexed with a covert subject pronoun after the verb, or after the predicate (*xabar*). The followers of the Kufi school allow subjects in preverbal and postverbal positions.

This difference with respect to the status of preverbal nominals is revived by modern linguists working in the generative framework. On one hand, modern grammarians following the Basran approach maintain that while postverbal nominals are subjects in an argument position, preverbal nominals are topics/left-dislocated nominals that are base-generated in a peripheral non-argument position (Alazzawi 1990; Soltan 2007; Al-Horais 2009; Al-Balushi 2011, 2012, among others). On the other hand, the modern followers of the Kufi approach, who work within transformational grammar theory, consider preverbal and postverbal positions to be genuine subject positions in Arabic, with preverbal subjects transformationally related to postverbal subjects (Mohammad 1990; Fassi Fehri 1993; Ouhalla 1994; Benmamoun 2008; Aoun, Benmamoun and Choueiri 2010, among others). The differing views in analyzing the nature of preverbal nominals in Arabic lead to the core questions that this dissertation addresses: Are preverbal nominals in Makkan Arabic genuine subjects? What is their position in the clause structure? Are they base-generated or derived by movement from lower positions?

The stand that the followers of the Basran approach take against analyzing preverbal nominals in Arabic as subjects is not without reason. There are two main properties that uniquely characterize preverbal nominals, but not postverbal nominals, which may imply that these two elements are not related. First, only definite nominals are allowed in preverbal positions whereas postverbal positions allow both definite and indefinite nominals. In example (4), only the definite nominal *al-bent* ‘the girl’ is grammatical in preverbal position. In postverbal position, this definiteness restriction does not apply and both forms, the definite and indefinite forms are acceptable.³

- (4) a. **al-bent** raḥ-at al-ḥafl-a
 the-girl.sg go.perf-3.sg.f the-party-sg.f
 ‘The girl attended the party.’
- b. ***bent** raḥ-at al-ḥafl-a
 girl.sg go.perf-3.sg.f the-party-sg.f
 ‘A girl attended the party.’
- (5) a. raḥ-at **al-bent** al-ḥafl-a
 go.perf-3.sg.f the-girl.sg the-party-sg.f
 ‘The girl attended the party.’
- b. raḥ-at **bent** al-ḥafl-a
 go.perf-3.sg.f the-girl.sg the-party-sg.f
 ‘A girl attended the party.’

Second, both subjects and non-subjects can both appear preverbally.

- (6) a. **al-bent** raḥ-at al-ḥafl-a
 the-girl.sg go.perf-3.sg.f the-party-sg.f
 ‘The girl attended the party.’

³ Musabhien (2009) argues that preverbal nominals in Jordanian Arabic can be indefinite as well, and that the definiteness restriction only applies on Standard Arabic. As a native speaker of another Arabic dialect, Makkan Arabic, I find indefinite preverbal nominals to be marginal or less natural.

- b. **al-bent** axo-ha ʃaf-ha fi al-ḥafl-a
 the-girl.sg brother.sg-3.sg.f see.perf.1.sg-3.sg.f in the-party-sg.f
 ‘The girl, her brother saw her at the party.’

The preverbal nominal *al-bent* ‘the girl’ is interpreted as a subject in (6a), and as a fronted object in (6b). Al-Azzawi (1990), adopting the Basran approach, analyzes all preverbal nominals in Standard Arabic as left-dislocated nominals that are co-indexed with resumptive pronominals in argument positions. In example (7a), Al-Azzawi assumes that the left-dislocated nominal is co-indexed with a null postverbal pronoun in the subject position. In examples (7b) and (7c), the left-dislocated nominals are co-indexed with postverbal clitics occurring in object and possessor positions, respectively.

- (7) a. al-ʔawlad-u_i nam-u_i
 the-boys-NOM slept-3.m.pl
 ‘As for the boys, they slept.’

 b. al-ʔawlad-u_i saʕad-na-hum_i
 ‘The boys-NOM helped-1.pl-them
 ‘As for the boys, we helped them.’

 c. aliy-un_i ʔaʔ-at ʔumm-u-hu_i
 Ali-NOM came-3.sg.f mother-NOM-his_i
 ‘As for Ali, his mother came.’
 [Al-Azzawi, 1990:89]

The examples in (6b), (7b) and (7c) above represent another controversial construction in Arabic, in which the initial nominal is followed by a complete sentence that already has a subject. In other words, such constructions may have two apparent subjects: one that is followed by a sentence which itself includes a second subject. I will refer to these subjects as the outer nominal and inner nominal, respectively. In (7b), the outer nominal is *al-ʔawlad-u* ‘the boys’ while the inner nominal is the null pronominal ‘we’.⁴ In (7c), *Aliy-un* ‘Ali’ is the outer nominal, and the inner nominal is *ʔumm-u-hu* ‘his mother’ in a postverbal position.

⁴ I avoid labeling nominals as subjects at this stage of the dissertation.

Recall that the Kufi approach posits that preverbal nominals are subjects. Contemporary work arguing for subjecthood of preverbal nominals includes Doron and Heycock (1999) who analyze the outer nominals in constructions such as in (7b) and (7c) as subjects. More specifically, they refer to the outer nominal as a broad subject, and the inner nominal as a narrow subject (see Chapter 6 for more details). Doron and Heycock argue that Standard Arabic and Hebrew can have broad subjects, exemplified in (8) below by *al-bait* ‘the house’ in Arabic and *Ruti* in Hebrew, in addition to narrow subjects exemplified by *alwaan-u-hu* ‘its colors’ and *yeŋ* ‘there-is’.⁵

- (8) a. **al-bait-u** alwaan-u-hu zaahiyat-un
 the-house-NOM color.pl-NOM-its bright-NOM
 ‘The house has bright colors. (lit= the house, its colors are bright)’
- b. **ruti** yeŋ la savlanut
 Ruti there-is to-her patience
 ‘Ruti has patience.’
 [Doron and Heycock 1999: 70-71]

Doron and Heycock define broad subjects as subjects of a sentential predicate (i.e., a complete clause that already has a subject), and narrow subjects as arguments of the verb that are usually contained within the sentential predicate of the broad subject. However, this analysis of broad subjects is challenged by other approaches that argue against preverbal subjects. Landau (2009), specifically addressing so-called broad subjects in Hebrew, analyzes them as left-dislocated nominals that are base-generated in a peripheral non-argument position. I address the double preverbal nominal construction in Chapter 6 of the dissertation.

In this dissertation I adopt the view that preverbal nominals are subjects and explore the various types of predicates that can appear after them. As shown in (9), preverbal subjects can be followed by verbal predicates (9a), non-verbal adjectival predicates (9b) and sentential predicates in (9c) and (9d).

⁵ In Hebrew, the word *yeS* seems to be equivalent to the nominal meaning of ‘having/owning’ and is considered as the narrow subject. The nominal meaning is not reflected in the translation that Doron and Heycock (1999) provide.

- (9) a. al-mumasil-a faz-at be-al-jayza
 the-actress-sg.f win.perf-sg.f with-the-award
 ‘The actress won the award.’
- b. al-mumasil-a mawhob-a
 the-actress-sg.f talented-sg.f
 ‘The actress is talented.’
- c. al-mumasil-a ada?-ha molfit
 the-actress-sg.f performance.sg-3.sg.f attractive
 ‘The actress, her performance is attractive.’
- d. al-mumasil-a al-naas ħab-o-ha
 the-actress-sg.f the-people.pl love.perf-3.pl-3.sg.f
 ‘The actress, the people loved her.’

Examples (9c) and (9d) represent the double preverbal subject construction (DPS). I argue in this dissertation that both preverbal nominals, the outer nominal and the inner nominal, occupy a recursive preverbal subject position. Thus, I propose a unified analysis of preverbal subjects in Makkan Arabic that encompasses both nominals under one analysis. I attribute the differences between the outer preverbal nominal and the inner preverbal nominal to the complexity of the predication that follows them. All the types of predicates that follow preverbal nominals in (9), can conjoin together to form a series of predicates that share the same preverbal nominal as (10) shows.

- (10) **al-mumasil-a** mawhob-a wa faz-at be-al-zayza wa
 the-actress-sg.f talented-sg.f and win.perf-sg.f with-the-award and
 ada?-ha molfit wa al-naas ħab-o-ha
 performance.sg-3.sg.f attractive and the-people.pl love.perf-3.pl-3.sg.f
 ‘The actress (is) talented, won the award, her performance is attractive, and the people loved her.’

The preverbal nominal *al-mumasila* ‘the actress’ in (10) is a subject for the non-verbal predicate *mawhoba* ‘talented’ and the verbal predicate *fazat be aljayza* ‘won the prize’. Since the verbal and the non-verbal predicates are coordinated with the sentential predicate *alnaas ħaboha*

‘people loved her’, I argue that these three types of phrases/clauses equally function as predicates, and the preverbal nominal equally functions as a subject for these predicates.⁶

This chapter is organized as follows. In section 1.2, I state the goal of the study and in section 1.3, I introduce Makkan Arabic, the Arabic variety under study in this dissertation. I discuss the basic properties of clause structures including the distribution of verbs, nouns, and adjectives, highlighting the structural aspects of relevance to the topic of this dissertation. In section 1.4, I discuss the significance of my study and lay out the organization of the dissertation in section 1.5. Finally, I provide a summary of the chapter in section 1.6.

1.2 The goal of the study

The status of preverbal subjects in Arabic, as well as in other null-subject languages, has always been controversial because these nominals display characteristics that are relevant to both subjects and topicalized/left-dislocated nominals (Eid 1975; Hassan 1975; Al-Makhzomi 1986; Alazzawi 1990; Barbosa 1995, Alexiadou and Anagnostopoulou 1998; Ordóñez and Treviño 1999; Al-Samurra’i 2001; Soltan 2006, 2007; Sheehan 2007; Al-Kawari 2008; Al-Horais 2009; Al-Balushi 2011, 2012; Alahdal 2018; Fakih, 2016; Jarrah 2020, among others). One reason that supports analyzing preverbal nominals as topics is that there is no pure syntactic motivation for subject movement in SVO order, which leads many linguists to argue against the preverbal position as a canonical subject position in languages like Arabic. Additionally, preverbal nominals and topicalized elements share a requirement that they both must be definite (referred to as the definiteness constraint, which I discuss in Chapter 4). On the contrary, postverbal nominals are not required to be definite. These observations lead many linguists to propose that all preverbal nominals in Arabic are topicalized/left-dislocated nominals that are base-generated in a clause-initial non-argument position.

In this dissertation, I argue against the proposal that all preverbal nominals in Makkan Arabic are topicalized/left-dislocated nominals. I suggest that there is a preverbal subject position

⁶ I am analyzing these as conjoined predicates rather than as conjoined sentences because this analysis is simpler which supports the economy principle and the simplicity of the theoretical design.

below the position occupied by topicalized/left-dislocated nominals, and that nominals in this preverbal subject position are derived by phrasal movement. The goals of this dissertation are as follows.

The first goal is accounting for the behavior of preverbal nominals with respect to *wh*-phrases. Nominals occupying the preverbal subject position and the topicalization position (above the subject position, in the CP domain) display distinctive behaviors while interacting with *wh*-phrases. The set of the nominal categories that can occupy subject position are different from those that can occupy the topic position.

The second goal is accounting for differences in resumptive pronouns that can appear in SVO sentences. There are two types of resumptive pronominals (optional and obligatory) that appear in SVO sentences as a result of phrasal movement through various specifier positions. In my analysis, I associate both types of resumptives with phrasal movement from lower subject and non-subject positions; more specifically, I identify the presence of obligatory resumptive pronominals as a result of phrasal movement from a non-subject position (e.g. direct and indirect objects) whereas resumptive pronouns are not obligatory in phrasal movement from lower subject position. I suggest that such phrasal movements are motivated to satisfy the Subject of Predication feature (SoP). This feature is a discourse feature that expresses speakers' perspectives regarding the nominal which is considered is more prominent in the event reported by the sentence. Although preverbal subjects and left-dislocated nominals are both motivated by discourse-related features, I present arguments that cast doubt upon analyzing all preverbal nominals as occupying non-argument clause initial positions.

The third goal is providing a unified syntactic analysis for all constructions in which a preverbal nominal is followed by a predicate, regardless of the type of predicate. This dissertation analyzes three types of predicates that can follow nominals: verbal predicates, non-verbal predicates and sentential predicates. The first type of predicate is the verbal predicate (traditionally called the VP) which consists of a verb and its phrasal complements. Examples of verbal predicates are the bracketed constituents in sentences like *the girl [sleeps]*, or *the girl [ate her sandwich]*. The second type of predicate is a non-verbal predicate (traditionally called a copular construction) such as a nominal or adjectival phrase. Examples of copular constructions

are the bracketed constituents in sentences like *the girl [is my friend]*, or *the girl [is pretty]*. Finally, a nominal can be followed by a sentential predicate (traditionally called an IP or TP) which itself includes a subject. Examples of sentential predicates include the bracketed constituents in sentences like *the girl, [I met her]*, or *the girl, [her bag is pretty]*.

1.3 The general properties of Makkan Arabic

It is important to distinguish Standard Arabic from modern Arabic dialects, including Makkan Arabic as they differ in numerous morphological and syntactic structures, some of which have an influence on analyzing preverbal nominals as subjects as will be shown later. Standard Arabic is the written language that is shared by all Arab dialects and countries. It is used in books and journal articles, in formal speeches and lectures and also in some formal TV programs. It is the language taught in schools and grammar books. Makkan Arabic is a type of colloquial urban Arabic that is spoken in the western region of Saudi Arabia, and more specifically in Makkah. Makkan Arabic distinctively differs from the other tribal dialects spoken in the city. It is used in conversations, informal speech, texting and social media platforms like Facebook and Twitter. It is only within the last few years that Makkan Arabic has begun to be used heavily as a written language in these informal contexts.

Makkan Arabic, like any Arabic variety, is a morphologically rich language. Nouns and adjectives are inflected for number (singular, dual or plural), gender (masculine or feminine) and definiteness (definite or indefinite). Verbs have two morphologically distinct forms: the perfective and the imperfective that are inflected for person (first [1], second [2] or third [3]), number (singular [sg] or plural [pl]) and gender (masculine [m] or feminine [f]). In this section, I provide a detailed description of Makkan Arabic in terms of the morphological inflections of pronouns, verbs, nouns and adjectives. Then, I present the clause structure of a few major constructions: negative clauses, interrogative clauses, embedded clauses and clause-initial nominals.

1.3.1 Morphological inflections

1.3.1.1 Pronouns

In Makkan Arabic, there are three types of pronouns: subject pronouns, object pronouns and possessive pronouns. Subject pronouns are free forms that may appear before or after verbs.

	Singular		Plural
	Masculine	Feminine	Masculine/Feminine
1	ʔana		ʔehna
2	ʔent-a	ʔent-i	ʔen-tu
3	hwa	hya	humma

Table 1: Subject Pronouns in Makkan Arabic

Object and possessive pronouns are bound clitics that are attached to verbs, prepositions, and nouns. The only difference between object pronouns and possessive pronouns is in the first singular form, and this contrast is obtained only between object pronouns versus objects of preposition and possessive pronouns. More specifically, the suffix *-ni* is attached to verbs while the suffix *-i* is attached to prepositions and nouns. In the following tables, I show object clitics hosted by the perfective verb *kallam* ‘talked’ (Table 2), the preposition *foog* ‘above’ (Table 3) and the noun *bayt* ‘house’ (Table 4).

	Singular		Plural
	Masculine	Feminine	Masculine/Feminine
1	kallam- ni		kallam- na
2	kallam-ak	kallam-ik	kallam-kum
3	kallam-o	kallam-ha	kallam-hum

Table 2: Pronominal Object Suffixes in Makkan Arabic (Verb is given in Masculine Singular)

	Singular		Plural
	Masculine	Feminine	Masculine/Feminine
1	foog- i		fooga- na
2	fooga-ak	foog-ik	fooga-kum
3	foog-o	fooga-ha	fooga-hum

Table 3: Pronominal Object after the preposition *foog* ‘above’

	Singular		Plural
	Masculine	Feminine	Masculine/Feminine
1	bayt- i		bayta- na
2	bayt-ak	bayt-ik	bayta-kum
3	bayt-u	bayta-ha	bayta-hum

Table 4: Pronominal Possessive Suffixes after the nominal *bayt* ‘house’

The distinction between the forms of the subject pronouns and the other pronominal clitic forms depends on their distribution in the clause structure. This distinction represents overt case-marking in the pronominal system in Makkan Arabic, which is lost in the nominal system. Standard Arabic, however, preserves case markers on nouns (nominative, accusative and genitive cases) and verbs (indicative, subjunctive and jussive cases), as well.

1.3.1.2 Verbs

There are two morphological forms of verbs in Makkan Arabic: the perfective and imperfective. These forms carry agreement suffixes that encode person, gender and number. The following table shows the agreement suffixes that appear on perfective and imperfective forms of the verb *kallam* ‘call/speak’. There is no gender distinction in plural verb forms, and all plural verbs are

masculine. Unlike in Standard Arabic, Makkan Arabic has lost the plural feminine inflection in its verbal system.

	Perfective Form			Imperfective Form		
	Singular		Plural	Singular		Plural
	Masculine	Feminine		Masculine	Feminine	
1	kallam-t		kallam-na	ʔa-kallem		ne-kallem
2	kallam-t	kallam-ti	kallam-tu	te-kallem	te-kallem-i	te-kallem-u
3	kallam	kallam-at	kallam-u	ye-kallem	te-kallem	ye-kallem-u

Table 5: Agreement Suffixes in perfective and imperfective verbs for the verb *kallam* ‘call’

Imperfective verbs can be used in various temporal non-past frames. For example, the imperfective form can be used to encode an event in present tense (11a), after a future-tense marker *raaH* (11b) and embedded after the past-tense verb *abXa* ‘I want’ (11c).

- (11) a. ana **a-kallem** omm-i kol yom
 I 1-call.imperf.sg mother.sg.-1.sg every day.sg
 ‘I call my mother everyday.’
- b. raah **a-kallem** omm-i bokra
 FUT 1-call.imperf.sg mother.sg.-1.sg tomorrow
 ‘I will call my mother tomorrow.’
- c. bege-et **a-kallem** omm-i bas ma-gedert
 want.perf-1.sg 1-call.imperf.sg mother.sg.-1.sg but NEG-was not able.perf.1.sg
 ‘I wanted to call my mother, but I couldn’t.’

On the contrary, perfective verbs are usually associated with semantic past tense. Perfective verbs are ungrammatical in any non-past contexts.

- (12) a. ana **kalam-t** omm-i ams
 I call.perf.1.sg mother.sg.-1.sg yesterday
 ‘I called my mother yesterday.’

- b. *ana **kalam-t** omm-i kol yom
 I call.perf.1.sg mother.sg.-1.sg every day.sg
 ‘I call my mother everyday.’
- c. *raaḥ **kalam-t** omm-i bokra
 FUT call.perf.1.sg mother.sg.-1.sg tomorrow
 ‘I will call my mother tomorrow.’
- d. *beḡe-et **kalam-t** omm-i bas ma-gedert
 want.perf.1.sg call.perf.1.sg mother.sg.-1.sg but NEG-was not able.perf.1.sg
 ‘I wanted to call my mother, but I couldn’t.’

There is another verb form in Makkan Arabic that appears in positive imperative clauses, which is the second person imperfective form but without the prefix. Negative imperative clauses employ the imperfective form of the verb after the negative particle *la* ‘do not’.

	Positive Imperative Form		Negative Imperative Form	
	Masculine	Feminine	Masculine	Feminine
Singular	kallem	kallem-i	la te-kallem	la te-kallem-i
Plural	kallem-u		la te-kallem-u	

Table 6: Imperative Forms in Makkan Arabic

Verbs in Makkan Arabic can be preceded by various modal/auxiliary verbs that carry temporal or aspectual interpretations. The auxiliaries *KWN* ‘to be’ and *SYR* ‘to become’ have perfective and imperfective forms on a par with ordinary verbs, and are thus inflected for person, gender and number.

	Perfective Form			Imperfective Form		
	Singular		Plural	Singular		Plural
	Masculine	Feminine	Masculine/Feminine	Masculine	Feminine	Masculine/Feminine
1	kun-t		kun-na	ʔa-kun		ne-kun
2	kun-t	kun-ti	kun-tu	te-kun	te-kun-i	te-kun-u
3	kaan	kaan-at	kaan-u	ye-kun	te-kun	ye-kun-u

Table 7: The perfective and Imperfective forms of the verb *KWN* ‘to be’

	Perfective Form			Imperfective Form		
	Singular		Plural	Singular		Plural
	Masculine	Feminine	Masculine/Feminine	Masculine	Feminine	Masculine/Feminine
1	ser-t		ser-na	ʔa-si:r		ne-si:r
2	ser-t	ser-ti	ser-tu	te-si:r	te-si:r-i	te-si:r-u
3	saar	saar-at	saar-u	ye-si:r	te-si:r	ye-si:r-u

Table 8: The perfective and Imperfective forms of the verb SYR ‘to become

When functioning as an auxiliary verb, *KWN* can be followed by perfective and imperfective forms of main verbs (13), while *SYR* can only be followed by the imperfective form of main verbs, as shown in (14).

- (13) a. al-bent **kaan-at** te-rooh hafl-at
the-girl.sg.f be.perf.3.sg.f 3.f.go.imperf.sg party-pl.f
‘The girl used to go to parties.’
- b. al-bent **kaan-at** rah-at al-hafla lama kallm-t-ha
the-girl.sg.f be.perf.3.sg.f go.perf-3.sg.f the-party.sg.f when talk.perf.1.sg-3.sg.f
‘The girl had gone to the party when I called her.’
- (14) a. al-bent **saar-at** te-rooh hafl-at
the-girl.sg.f become/start.perf.3.sg.f 3.f.go.imperf.sg party-pl.f
‘The girl started to go to parties.’
- b. *al-bent **saar-at** rah-at al-hafla
the-girl.sg.f become/start.perf.3.sg.f go.perf-3.sg.f the-party.sg.f
‘*The girl started went to the party.’

Other auxiliaries that can precede verbs include *emkin/yemkin* ‘maybe’, *lessa* ‘still’ and *ged* ‘already’. They have fixed invariant forms and can precede both the perfective and imperfective verbs. Pronominal clitics indexing with the subject can optionally be attached to the ends of these forms to produce various inflected forms of each word.

- (15) a. al-bent **yemkin** raḥ-at al-ḥafla
 the-girl.sg.f maybe/probably go.perf-3.sg.f the-party.sg.f
 ‘The girl probably went to the party.’
- b. al-bent **yemkin-ha** raḥ-at al-ḥafla
 the-girl.sg.f maybe/probably-3.sg.f go.perf-3.sg.f the-party.sg.f
 ‘The girl, probably she went to the party.’
- c. al-bent **yemkin** te-rooḥ al-ḥafla
 the-girl.sg.f maybe/probably 3.f.go.imperf.sg the-party.sg.f
 ‘The girl probably would go to the party.’
- d. al-bent **yemkin-ha** te-rooḥ al-ḥafla
 the-girl.sg.f maybe/probably-3.sg.f 3.f.go.imperf.sg the-party.sg.f
 ‘The girl, probably she would go to the party.’
- (16) a. al-bent **ged** raḥ-at al-ḥafla
 the-girl.sg.f already go.perf-3.sg.f the-party.sg.f
 ‘The girl already went to the party.’
- b. al-bent **geed-ha** raḥ-at al-ḥafla⁷
 the-girl.sg.f already-3.sg.f go.perf-3.sg.f the-party.sg.f
 ‘The girl, she already went to the party.’
- c. al-bent **ged** dayman te-rooḥ ḥafl-at
 the-girl.sg.f already always 3.f-go.imperf.sg party-pl.f
 ‘The girl already always goes to parties. (So she does not need to be encouraged to go)’
- d. al-bent **geed-ha** te-rooḥ ḥafl-at
 the-girl.sg.f already-3.sg.f 3.f-go.imperf.sg party-pl.f
 ‘The girl, she already goes to parties.’
- (17) a. al-bent **lessa** ma raḥ-at al-ḥafla
 the-girl.sg.f still not go.perf-3.sg.f the-party.sg.f
 ‘The girl still did not go to the party.’
- b. al-bent **lessa-t-ha** ma raḥ-at al-ḥafla
 the-girl.sg.f still-3.sg.f not go.perf-3.sg.f the-party.sg.f
 ‘The girl, she still did not go to the party.’

⁷ I analyze *ged* ‘already’ as an aspect word that heads the AspP projection. I consider the inflected form as evidence for subjects moving through the specifier of this position (more details are in Chapters 3 and 5).

- c. al-bent **lessa** ma te-rooḥ ḥafl-at
the-girl.sg.f still not 3.f-go.imperf.sg party-pl.f
‘The girl still does not go to parties. (because she is too young)’
- d. al-bent **lessa-t-ha** ma te-rooḥ ḥafl-at
the-girl.sg.f still-3.sg.f not 3.f-go.imperf.sg party-pl.f
‘The girl, she still does not go to parties.’

The last type of auxiliary that can precede verbs in Makkan Arabic is used to encode future tense. There are two future particles that always have fixed forms: the bound prefix *ḥa* and the free form *raḥ*. Only the imperfective form of the verb can follow these particles.

- (18)a. al-bent ḥa-te-kallem omm-ha
the-girl.sg.f will-3.f-call.imperf.sg mother.sg.-3.sg.f
‘The girl will call her mother.’
- b. al-bent raḥ te-kallem omm-ha
the-girl.sg.f will 3.f-call.imperf.sg mother.sg.-3.sg.f
‘The girl will/is going to call her mother.’
- c. *al-bent ḥa-kallam-at omm-ha
the-girl.sg.f will-call.perf.1.sg mother.sg.-3.sg.f
- d. *al-bent raḥ kallam-at omm-ha
the-girl.sg.f will call.perf.1.sg mother.sg.-3.sg.f

Certain verbs in Makkan Arabic can be followed by the imperfective forms of verbs, such as *abXa* ‘want’, as in (19).

- (19)a. a-bḡa a-rooḥ al-ḥafla
1-want.imperf.sg 1-go.imperf.sg the-party.sg.f
‘I want to go to the party.’
- b. beḡ-et a-rooḥ al-ḥafla
want.perf-1.sg 1-go.imperf.sg the-party.sg.f
‘I wanted to go to the party.’
- c. *a-bḡa rooḥ-t al-ḥafla
1-want.imperf.sg go.perf-1.sg the-party.sg.f

d. *beġ-et	rooĥ-t	al-ħafla
want.perf-1.sg	go.perf-1.sg	the-party.sg.f

Unlike Makkan Arabic where no complementizer is needed between the two verbs, an infinite complementizer *ʔan* is inserted between the finite and the infinite verbs in Standard Arabic as shown (20).

- (20) a. ʔu-ridu ʔan a-ðhaba ʔela al-ħafla
 1-want.imperf.sg Comp 1-go.imperf.sg to the-party.sg.f
 ‘I want to go to the party.’
- b. *ʔu-ridu a-ðhaba ʔela al-ħafla
 1-want.imperf.sg 1-go.imperf.sg to the-party.sg.f

1.3.1.3 Nouns

Nouns in Makkan Arabic are inflected for number (i.e. singular, dual and plural) and gender (masculine and feminine). Although the inflection of the dual number is lost in the verbal agreement system in Makkan Arabic, it is preserved in nominal (and adjectival) forms. Plural forms can have the regular feminine suffix *-aat*, the regular masculine suffix *-een* or have irregular plural affixes.

	‘engineer’		‘pen’	‘pencil’
	Masculine	Feminine	Masculine	Feminine
Singular	muhandes	muhandes-a	galm	mersam-a
Dual	muhandes -eyn	muhandes-aten	galam-eyn	mersam-aten
Plural	muhandes -een	muhandes-aat	aglaam	marasem

Table 9: Noun Forms in Makkan Arabic

Animate nouns, such as those referring to professions or animals, tend to have regular plural forms that show a distinction in gender. But, inanimate nouns, whether singular or plural, have irregular plural forms that are inherently either feminine or masculine. For example, a feminine singular noun (e.g. *tufaħa* ‘apple (F)’) can have a masculine plural form (*tufaħa* ‘apples (M)’). Nouns in Makkan Arabic are also inflected for definiteness. While indefinite nouns are not

marked in Makkan Arabic (21), the definiteness particle *al-* mark definite nouns and can precede singular, dual and plural nouns (22).

- | | | | | | |
|---------|--------------------------------------|----|---|----|--|
| (21) a. | galm
pen.sg.m
'a pen' | b. | galm-eyn
pen-dual.m
'two pens' | c. | aglam
pen.pl.f
'pens' |
| (22) a. | al-galm
the-pen.sg.m
'the pen' | b. | al-galm-eyn
the-pen-dual.m
'the two pens' | c. | al-aglam
the-pen.pl.f
'the pens' |

Demonstratives can precede definite nouns and must match them in number and gender (23) and (24). Unlike Standard Arabic, Makkan Arabic has lost the dual demonstratives (24b) and feminine plural demonstratives (24c). Instead, masculine plural demonstratives are used before animate dual and plural nouns. Before inanimate dual and plural nouns, the singular form of the demonstrative is used (25).

- | | | |
|---------|---|---|
| (23) a. | hada/hadak
this/that
'this/that engineer (M)' | al- muhandes
the-engineer.sg.m |
| b. | hadol/hadolak
these/those
'these/those (two) engineers (M)' | al- muhandes-eyn
the-engineer.dual.m |
| c. | hadol/hadolak
these/those
'these/those engineers (M)' | al- muhandes-een
the-engineer.pl.m |
| (24) a. | hadi/hadik
this/that
'this/that engineer (F)' | al-muhandes-a
the-engineer.sg.f |
| b. | hadol/hadolak
these/those
'these/those (two) engineers (F)' | al- muhandes-ateyn
the-engineer.dual.f |
| c. | hadol/hadolak
these/those
'these/those engineers (F)' | al- muhandes-aat
the-engineer.pl.f |

- (25) a. hada/hadak al-galm
 this/that the-pen.sg.m
 'the pen (M)'
- b. hadi/hadik al-galm-eyn
 this/that the-pen-dual.f
 'this/that two pens (F)'
- c. hadi/hadik al-aglam
 this/that the-pen.pl.f
 'this/that pens (F)'

Nouns can participate in the construct state, a construction which consists of an indefinite head noun (the possessee) followed by a definite or indefinite possessor which is assigned genitive Case. The definiteness of the construct phrase is determined by the definiteness of the possessor. The construct state construction is used to express a possession relation between two nouns in Arabic.

- (26) a. kitab bent
 book.sg.m girl.sg.f
 'a girl's book'
- b. kitab al-bent
 book.sg.m the-girl.sg.f
 'the girl's book'

1.3.1.4 Adjectives

Adjectives in Makkan Arabic follow nouns and are either attributive or predicative. Attributive adjectives match the nouns they modify in number, gender and definiteness (27) and (28).

- (27) a. wald zaki
 boy.sg.m smart.sg.m
 'a smart boy'
- b. al-wald al-zaki
 the-boy.sg.m the-smart.sg.m
 'the smart boy'
- c. awlaad azkya
 boy.pl.m smart.pl.m
 'smart boys'
- d. al-awlaad al-azyaa
 the-boy.pl.m the-smart.pl.m
 'the smart boys'

- (28) a. bent helw-a b. al-bent al- helw-a
girl.sg.f beautiful.sg.f the-girl.sg.f the-beautiful.sg.f
'a beautiful girl' 'the beautiful girl'
- c. banat helw-een/helw-aat d. al-banat al-helw-een/al-helw-aat
girl.pl.f beautiful.pl.f the-girl.pl.f the-beautiful.pl.m/f
'beautiful girls' 'the beautiful girls'

Predicative adjectives (which are always indefinite) match the nouns they modify (which are always definite) only in number and gender. Note that indefinite nominals followed by adjectives cannot be interpreted as subjects that are followed by predicative adjectives. Rather, these nominals are interpreted as heads of a noun phrase and the adjective as an attributive modifier, shown in (27c), (27d), (28c) and (28d). Although the gender distinction between plural adjectives is lost in Makkan Arabic, the loss is not absolute. Feminine plural adjectives are used occasionally in Makkan Arabic but are preserved in some rural Makkan Arabic dialects.

- (29) a. al-wald zaki
 the-boy.sg.m smart.sg.m
 ‘The boy is smart.’
- b. al-awlad azkyaa
 the-boy.pl.m smart.pl.m
 ‘The boys are smart.’
- c. al-bent ħelwa
 the-girl.sg.f beautiful.sg.f
 ‘The girl is beautiful.’
- d. al-banat ħelw-een/ħelw-aat
 the-girl.pl.f beautiful.pl.m/f
 ‘The girls are beautiful.’

Adjectives describing animate nominals match them in number, as shown above in (27) – (29), but adjectives describing inanimate nominals are always in the singular form like in (30a). Plural nouns referring to animals can be described either by singular adjectives or by plural adjectives when the animals are perceived as individuals, or there is a reference to specific group of animals (30b).

- (30) a. al-akwab ġali-a
 the-cup.pl.f expensive-sg.f
 ‘The cups are expensive.’
- b. al-ḡaṣafeer ḡelw-a/ḡelw-een
 the-bird.pl.f nice-sg.f/nice-pl.m
 ‘The birds are nice.’

1.3.2 Clause Structure

1.3.2.1 Negative Clauses

In Makkan Arabic, there are two negation particles that distinguish verbal versus non-verbal predicates. Verbs are negated with *maa* (31a) while *mu* precedes non-verbal categories such as nouns, adjective and prepositional phrases (32). Non-verbal predicates can also be negated with the inflected negation particle *maa* followed by pronominal clitics that match the subject.

- (31)a. al-bent maa aḡtrat al-fostan
 the-girl.sg.f Neg buy.perf.3.sg.f the-dress.sg.m
 ‘The girl did not buy the dress.’
- b. al-bent maa te-ḡtari faṣateen
 the-girl.sg.f Neg 3.f-buy.imperf.sg dress.pl.m
 ‘The girl does not buy dresses.’
- (32)a. al-fostan mu/maa-hu ḡelw
 the-dress.sg.m Neg/Neg-3.sg.m beautiful.sg.m
 ‘The dress is not beautiful.’
- b. al-fostan mu/maa-hu muḡkila
 the-dress.sg.m Neg/Neg-3.sg.m problem.sg.f
 ‘The dress is not a problem.’
- c. al-bent mu/maa-hi fi al-soog
 the-girl.sg.f Neg/Neg-3.sg.f in the-mall.sg.m
 ‘The girl is not at the mall.’

1.3.2.2 Interrogative Clauses

In Makkan Arabic, yes/no questions are indicated through intonation only. That is, interrogative sentences end with high intonation to mark them as questions. This differs from Standard Arabic in which a yes/no question word *hal* precedes the sentence. Another major difference is that Makkan Arabic allows SVO and VSO order in interrogative sentences while Standard Arabic only allows VSO after the question word *hal*, and after other question words as shown in (33) and (34).

- (33) a. *weʃl* *al-ḏáyf?*
 arrive.perf.3.sg.m the-guest.sg.m
 ‘Did the guest arrive?’
- b. *al-ḏáyf* *wéʃl?*
 the-guest.sg.m arrive.perf.3.sg.m
 ‘Did the guest arrive?’
- (34) a. *hál* *weʃl* *al-ḏáyf?*
 Que arrive.perf.3.sg.m the-guest.sg.m
 ‘Did the guest arrive?’
- b. **hál* *al-ḏáyf* *wéʃl?*
 Que the-guest.sg.m arrive.perf.3.sg.m

Interrogative sentences in Makkan Arabic employ the following question words, shown in Table 10. There is no corresponding *wh*-word for *whose* to ask about the possessor in Arabic. Instead, Makkan Arabic speakers commonly use the phrase *ḥaq meen* ‘of whom’ to ask about the possessor.

Question Word	Meaning	Question Word	Meaning
<i>eef</i>	‘what’	<i>keef</i>	‘how’
<i>leef</i>	‘why’	<i>meta</i>	‘when’
<i>meen</i>	‘who’	<i>kam</i>	‘how much’
<i>ḥaq meen</i>	‘of whom’ (whose)	<i>feen</i>	‘where’

Table 10: Question words in Makkan Arabic

Question words in Makkan Arabic can occur in various positions in the clause structure; they can appear at the beginning of the sentence, before the subject or after the subject. On the contrary, wh-words in Standard Arabic can only precede verbs as shown in (35) and (36).⁸

(35) a. al-bent raḥ-at feen? (Makkan Arabic)
 the-girl.sg.f go.perf-3.sg.f where
 ‘Where did the girl go? (Lit: The girl went where?)’

b. feen al-bent raḥ-at?
 where the-girl.sg.f go.perf-3.sg.f
 ‘Where did the girl go?’

c. al-bent feen raḥ-at?
 the-girl.sg.f where go.perf-3.sg.f
 ‘Where did the girl go? (Lit: The girl, where did (she) go?)’

(36) a. ayna ḏahab-at al-bent? (Standard Arabic)
 where go.perf-3.sg.f the-girl.sg.f
 ‘Where did the girl go?’

b. *ayna al-bent ḏahab-at?
 where the-girl.sg.f go.perf-3.sg.f

1.3.2.3 Embedded Clauses

Clauses in Makkan Arabic can be embedded under certain verbs, nouns and adjectives. The use of complementizers is optional. There are two forms of complementizers in Makkan Arabic, both are shown in (37) below. First, an invariant form of the complementizer *enno* may initiate the sentential complement. Alternatively, an inflected complementizer hosting an object clitic pronoun that matches the subject of the embedded clause can be used as well in Makkan Arabic.

(37) a. a-ḥob (enno/enn-na) ne-rooḥ al-ḥafl-a sawa
 1.sg-love.imperf Comp/Comp-1.pl 1.pl-go.imperf the-party.sg-f together
 ‘I love that we go to the party together.’

⁸ In Standard Arabic, verbs must be adjacent to the question words without any interfering elements, which is known as the Adjacency Constraint (Shlonsky 2000; Aoun, Benmamoun and Choueiri 2010). This constraint is inactive in modern Arabic dialects, including Makkan Arabic.

- b. mohem (enno/enn-na) ne-rooh al-hafl-a sawa
important.sg.m Comp/Comp-1.pl 1.pl-go.imperf the-party.sg-f together
'It is important that we go to the party together.'
- c. moʃkel-a (enno/enn-na) roh-na al-hafl-a sawa
problem-sg.f Comp/Comp-1.pl go.perf-1.pl the-party.sg-f together
'It is a problem that we go to the party together.'

In addition to embedded clauses, Makkan Arabic uses relative clauses to modify nouns. In Makkan Arabic, there is only one invariant relativizer which is *elle* 'that'. The usage of this relativizer is sensitive to the definiteness of the modified nominals. More specifically, relative clauses that modify a definite nominal are obligatorily headed by the relativizer *elle* 'that' whereas the relative clauses that modify indefinite nominals obligatorily lack the relativizer (38).

- (38)a. felt al-borotqala elle ʔahat ʃala al-arq
pick.perf.1.sg the-orange.sg.f that fall.perf.3.sg.f on the-floor.sg.f
'I picked the orange that fell on the floor.'
- b. felt borotqala ʔahat ʃala al-arq
pick.perf.1.sg orange.sg.f fall.perf.3.sg.f on the-floor.sg.f
'I picked an orange (that) fell on the floor.'
- c. feeh borotqala ʔahat ʃala al-arq
in-it orange.sg.f fall.perf.3.sg.f on the-floor.sg.f
'There is an orange (that) fell on the floor.'

1.3.2.4 Clause-initial nominals: Pragmatic description

In Arabic, sentences can have VSO word order in which speakers neutrally report the event without highlighting the role of any nominal in the clause.⁹ In (39a), the sentence neutrally reports the event in which *the company gave the workers all the rewards*. By contrast, the

⁹ I consider VSO the default word order because it involves the simplest derivation. This is a syntactic characterization, which is different from the more commonly used criterion of frequency of use. In other words, even though SVO is more frequently used and is pragmatically more marked, I still consider VSO to be more basic, perhaps reflecting a change in progress, whereby SVO is taking over as the default. More research is needed in this regard.

speaker of the SVO sentence in (39b) emphasizes the subject *the company* and makes it the starting point from which the event is reported. The information structure reflected in this sentence shows that the speaker perceives the nominal *the company* as more prominent than the other nominals and the rest of the sentence is a predication to this nominal.

The SVO word order is the most common word order in Makkan Arabic and most Arabic modern varieties.

- (39) a. aṣṭ-at al-ḡarika al-ḡommal kol al-ḡelawat
 give.perf-3.sg.f the-company.sg.f the-worker.pl.m all the-reward.sg.f
 ‘The company gave the workers all the rewards.’
- b. al-ḡarika aṣṭ-at al-ḡommal kol al-ḡelawat
 the-company.sg.f give.perf-3.sg.f the-worker.pl.m all the-reward.sg.f
- ṣaraḥa ḡarika mummtaz-a
 honestly company.sg.f excellent.sg.f
 ‘The company gave the workers all the rewards. Honestly, it is a good company.’

Speakers can optionally begin the sentence with any other nominal in the sentence, other than the subject to emphasize the role of this nominal in the information structure of the clause. In (40), the direct object *the workers* is emphasized to reflect the speaker’s organization of the information such that this nominal is more prominent. Note that unlike the sentence in (39b) in which the clause-initial nominal is originally a subject, the clause-initial nominal in (40) is originally a direct object. Note also that the predication clause after the fronted object can be in VSO (40a) and SVO (40b) word orders, again to reflect speakers’ choice of what nominal they perceive as more prominent in the predication clause. In (40), the sentence reports an event about *the workers who have been given all their rewards and have no right to complain*. In (40b), the speaker additionally emphasizes the role of *the company* in the predication clause about *the worker* while the role of *the company* is reported neutrally in the predication clause in (40a).

- (40) a. al-ṣommal aṣṭ-at-hum al-ḡarika kol al-ṣelawat
 the-worker.pl.m give.perf-3.sg.f the-company.sg.f all the-reward.sg.f
- ma-li-hom ḥag ye-tḡakk-o
 NEG-for-3.pl.m right.sg.m 3.m-complain-pl
 ‘The workers, the company gave them all the rewards. They have no right to complain’.
- b. al-ṣommal al-ḡarika aṣṭ-at-hum kol al-ṣelawat
 the-worker.pl.m the-company.sg.f give.perf-3.sg.f all the-reward.sg.f
- ma-li-hom ḥag ye-tḡakk-o
 NEG-for-3.pl.m right.sg.m 3.m-complain-pl
 ‘The workers, the company gave them all the rewards. They have no right to complain’.

Alternatively, speakers may emphasize the indirect object and make it as the starting point from which the event is reported. In (41), the nominal *all the rewards* is perceived to be the prominent nominal in the context of the sentence, so it appears in a clause-initial position. The speaker’s choice for the structure of the predication clause may be a VSO clause without emphasizing any other nominal (41a) or may be an SVO clause to emphasize the role of *the company* in the predication clause (41b).

- (41) a. kol al-ṣelawat aṣṭ-at-ha al-ḡarika li al-ṣommal
 all the-reward.sg.f give.perf-3.sg.f the-company.sg.f to the-worker.pl.m
- wala ṣelawa naḡṣ-a
 not-one reward missed-sg.f
 ‘The company gave the workers all the rewards. Not a single reward is missed’
- b. kol al-ṣelawat al-ḡarika aṣṭ-at-ha li al-ṣommal
 all the-reward.sg.f the-company.sg.f give.perf-3.sg.f to the-worker.pl.m
- wala ṣelawa naḡṣ-a
 not-one reward missed-sg.f
 ‘The company gave the workers all the rewards. Not a single reward is missed.’

The same options of emphasizing any nominal are available for the sentence in (42a). Speakers may choose to report the event without emphasizing any nominal (42a) or may choose to emphasize the subject (42b), the direct object (42c) or the object of preposition (42d). The choice

that speakers make reflects their mental information structure about what nominal they perceive as more prominent. Note that the predication clause in (42c) and (42d) are in SVO word order, which is more common, but VSO word order is an available option as well.

- (42) a. ḥaṭ-at al-bent al-kitab ʕala al-ṭawla
 put.perf-3.sg.f the-girl.sg.f the-book.sg.m on the-table.sg.f
 ‘The girl put the book on the table.’
- b. al-bent ḥaṭ-at al-kitab ʕala al-ṭawla
 the-girl.sg.f put.perf-3.sg.f the-book.sg.m on the-table.sg.f
- wa raḥ-at
 and leave.perf-3.sg.f
 ‘The girl put the book on the table and left.’
- c. al-kitab al-bent ḥaṭ-at-o ʕala al-ṭawla
 the-girl.sg.f put.perf-3.sg.f the-book.sg.m-3.sg.m on the-table.sg.f
- daheen ma ḥaṣalat-o
 now NEG find.perf.3.sg.f-3.sg.m
 ‘The girl put the book on the table. Now, she couldn’t find it.’
- d. al-ṭawla al-bent ḥaṭ-at al-kitab ʕal-eha
 the-table.sg.f the-girl.sg.f put.perf-3.sg.f the-book.sg.m on-3.sg.f
- wa hya wisx-a daheen al-kitab at-wasax kman
 while 3.sg.f dirty.sg.f now the-book.sg.m get-dirty.perf.3.sg.m too
 ‘The table, the girl put the book on it while it is dirty. Now the book is dirty too.’

To sum up, speakers of Arabic, Makkan Arabic in this this dissertation, can optionally emphasize any nominal that they perceive as more prominent to reflect the organization of information.¹⁰ In

¹⁰ One actual example of fronting nominals that I personally produced. My daughter “Nada” used to attend a one-to-one class with a female tutor at the tutor’s home. I wanted to send a text message to my daughter’s tutor to inform her that my husband was outside her house to pick up our daughter. However, starting the text message with “Nada’s dad” as the subject of the sentence as in (i) seemed inappropriate because a strange male would be the starting point of the reported event in my text message to the tutor. Rather, I made “Nada” the starting point since she is more relevant to the tutor (ii).

this dissertation, I syntactically encode speakers’ pragmatic perspectives of nominals prominence via the feature Subject of Predication (SoP). More specifically, the nominal which is perceived by the speaker to be more prominent, carries an interpreted feature (SoP) which is motivated to move to a clause-initial position to satisfy the uninterpreted uSoP on the head of SubjP. As mentioned earlier, this position is recursive, so more than one nominal may be perceived as prominent. Such nominals do not have to present given information nor be established in the context. That is, most of the sentences presented in this section can be used as responses to questions such as “*what happened?*”. I discuss the nature of this feature in more detail in Chapter 2.

1.4 Significance of the study

This dissertation contributes to the general field of theoretical linguistics and specifically to the study of Arabic syntax. The status of preverbal nominals in Arabic has received much attention by traditional Arabic grammarians (Eid 1975; Hassan 1975; Al-Makhzomi 1986, among others), but contemporary work that explores the properties of these preverbal nominals in modern Arabic varieties is still limited. Cross-linguistically, the debate over whether preverbal nominals display the properties of genuine subjects or left-dislocated nominals is ongoing. Many cross-linguistic studies have been conducted either to argue that preverbal nominals are subjects (Cardinaletti, 1997, 2004; Goodall, 2002; Suñer, 2003; Camacho, 2006; Sheehan, 2007; Camacho, 2013, among others) or that such preverbal nominals are topics (Barbosa, 1995, Alexiadou and Anagnostopoulou, 1998; Ordóñez and Treviño, 1999; Frascarelli, 2007, among others). In this dissertation, I provide an analysis of the position and derivation of preverbal nominals in Makkan Arabic employing recent syntactic theory.

(i)	abu dad.sg.m ‘Nada’s dad is outside.’	nada Nada	barra outside
(ii)	nada Nada ‘Nada, her dad is outside.’	abu-ha dad.sg.m-3.sg.f	barra outside

I suggest that there is a preverbal subject position below the position occupied by topicalized/left-dislocated nominals, and that such preverbal positions in languages like Arabic are different from subject position in languages like English in many ways. Preverbal subjects in English, for example, are derived by an obligatory movement that is motivated by pure syntactic requirements (i.e. EPP feature) to a unique [Spec, TP] position. In contrast, preverbal subjects in Makkan Arabic are derived by an optional movement that is motivated by the discourse-relevant feature (SoP). The landing site of such a movement is a recursive specifier position of Subject of Predication projection.

I also present a unified analysis regarding how the EPP feature is satisfied in all types of sentences in Makkan Arabic, including copular sentences. Satisfying the EPP feature is challenging in the syntax of Arabic because both SVO and VSO order is allowed. The EPP feature is assumed to be satisfied in SVO sentences by subject movement to the specifier of TP (Mohammad 1990, 2000; Benmamoun 1992, 1998, 1999, 2000, 2008; Fassi Fehri, 1993; Aoun et al. 1994; Ouhalla 1994; Harbert and Bahloul, 2002; Musbahien, 2008; Aoun et al. 2010; Al-Daher 2016; Al-Qahtani, 2016; Sahawneh 2017, among others). However, there are various suggestions in the literature on satisfying the EPP feature in VSO sentences. In one suggestion, a unified analysis is presented, so that subjects also move to [Spec, TP] in order to satisfy EPP, then verbs move to a position higher than TP to achieve the VSO order (Aoun et al., 1994 and Aoun et al., 2010). In some analyses, a null pronoun is posited to occupy [Spec, TP] that satisfies the EPP feature in VSO sentences (Mohammad, 1990 and Sahawneh, 2017). Another suggestion is that Arabic lacks the EPP feature in VSO sentences (Soltan 2006, 2007). A dual approach to satisfy EPP is also embraced by some linguists (Doner, 2012, 2017, among others) in which the type of EPP-checking is based on the sentence word order. In this dissertation, I adopt the perspective that the EPP is satisfied indirectly by verb movement from v to T (Alexiadou & Anagnostopoulou, 1998 and Wurmbrand and Haddad, 2016). I assume that verbs undergo movement from v to T in SVO and VSO sentences, and that this verb movement satisfies EPP. This analysis provides a unified pattern for checking the EPP feature in Makkan Arabic across SVO and VSO sentences.

This dissertation also presents a unified analysis of copular sentences in Makkan Arabic. Present tense copular sentences are assumed to completely lack copula verbs, hence are referred to as verbless sentences (Benmamoun 2008, Aoun et al. 2010, among others). These so-called verbless sentences are claimed to display a unique pattern that is not attested in other types of sentences, including their future and past counterparts. In such a construction, verbs are completely absent with no verbal projection in the clause structure, and overt subjects are obligatory. Such assumptions regarding the obligatory subjects are not compatible with the common belief that Arabic is a null-subject language. I show that copulas can be overt in present tense sentences to encode non-deictic events, which is a possibility that is not considered by the verbless-sentence approach (Benmamoun 2008, Aoun et al. 2010, among others). In this dissertation, I propose an analysis of the so-called verbless sentences that is in line with the pattern of clause structures in Makkan Arabic. I argue that the terminal nodes of copulas are always fully specified for verbal features, and that copulas are morphologically null to express deictic present events. My analysis provides evidence that subjects can also be null pronouns despite the assumed structural absence of copulas in verbless sentences.

The last point in my analysis of preverbal subjects is that I present two types of resumptive pronominals, optional and obligatory resumptives, that are traditionally studied as distinct from one another. I claim that optional resumptives result from phrasal movement from a lower subject position while obligatory resumptives result from phrasal movement of non-subject positions.

1.5 Content

This dissertation is divided into seven chapters. In this section, I outline the content of each chapter. Following the current introductory chapter, the thesis proceeds as follows:

Chapter 2: Theoretical Synopsis

In this chapter, I introduce the syntactic theory and the theoretical assumptions upon which I base my analysis of preverbal nominals in Makkan Arabic. I build the major part of my analysis on Chomsky's (2000, 2001, 2005) Minimalist Program (MP), and more specifically the Feature-Inheritance approach (Chomsky, 2005). I also adopt Cardinaletti's (2004) Cartography approach of deconstructing the traditional notion of subject into several functional projections as a development of Rizzi's (1997) CP-split. To account for the spell-out of words and null elements in this dissertation, I employ the Distributed Morphology framework.

Chapter 3: Null and Postverbal Subjects

In this chapter, I account for the derivation of VSO sentences involving verbal predicates and for sentences with null pronouns. Under the assumption that the EPP feature is satisfied by verb movement from *v* to T, I argue that in null-subject and VSO structures, subjects stay in their base thematic position in [Spec, *v*P]. According to the Agree-Framework (Chomsky 2000, 2001, 2005), Case and agreement features are valued through the operation Agree that is established between probe T and the nominal goal in [Spec, *v*P]. As for the [Spec, TP] position, in which subjects reside in languages like English, I argue in this chapter that this position does not host subjects in Makkan Arabic. I base my argument on the appearance of optional resumptive pronominals in the lower subject positions [Spec, *v*P], [Spec, AspP] and [Spec, TP]. These resumptives appear in SVO sentences after overt nominal preverbal subjects. I suggest that these positions represent a movement chain, and that preverbal subjects undergo a successive movement to a higher subject position above TP leaving pronominal copies of their phi-features behind.

Chapter 4: Preverbal Subjects and Topics

In this chapter, I argue against the common assumption that all preverbal subjects in null-subject languages are instances of left-dislocation. I tease apart two preverbal positions where nominals can be hosted, namely [Spec, SubjP] and [Spec, TopP]. I show that these positions belong to

different domains and attract different categories. [Spec, SubjP] is an argument position in the TP domain that hosts structural subjects, while [Spec, TopP] is a non-argument position in the CP domain that hosts left-dislocated phrases. These two preverbal positions, [Spec, SubjP] and [Spec, TopP], follow from assumptions of the Cartography approach introduced by Rizzi (1997). Influenced by Rizzi who suggests splitting the CP domain into various projections, Cardinaletti (1997, 2004) splits the subject-domain into lower and higher subject positions. By adopting a cartographic approach, I propose that preverbal subjects in Makkan Arabic occupy the subject position in [Spec, SubjP] while topicalized/left-dislocated nominals occupy [Spec, TopP]. Based on the positions that nominal categories occupy when co-occurring with *wh*-phrases, I argue that certain nominal categories such as bare negative quantifiers and modified bare nominals can only occur in subject position but cannot occupy left-dislocated positions. I suggest that these preverbal nominals in [Spec, SubjP] are derived by successive movement to satisfy the *SoP* feature on the head *Subj*. I also tackle the issue of definiteness in relation to preverbal subjects and examine the effect of modification and existential particles in expanding the distribution of indefinites preverbally. Modified indefinite nominals and bare indefinite nominals preceded by extensional particles can exceptionally occur in preverbal subject position.

Chapter 5: Subjects in Copular Sentences

In this chapter, I discuss three main structural aspects of copular sentences in Makkan Arabic: the derivation of copulas, the position of pre-copula subjects and the distinction between two types of pronominals that may appear in copular sentences. It is commonly assumed that Arabic copular sentences employ copulas only in non-present tenses, and that such copulas are completely absent in the present tense (Benmamoun 2008, Aoun et al. 2010, among others). I argue in this chapter that copulas are always structurally present but are phonologically null in deictic present tense. Such copulas can be phonologically overt in the present tense to express non-deictic events such as wishes, conditions and habitual events. I account for the phonological absence of copulas in the deictic present tense by adopting the Distributed Morphology framework. In this chapter, I also argue against another common assumption regarding copular sentences in Arabic which holds that subjects are obligatory in present tense copular sentences

that lack copulas (Benmamoun 2008, Aoun et al. 2010, among others). I propose that subjects can be null in copular sentences such as the case of obligatory null expletives before weather predicates (e.g. *it is cold today*) and before adjectives that take clausal complements (e.g. *it is impossible that I go*). Subjects can be optionally null pronouns when they are identified in the context (e.g. *[I am] very sick today and cannot leave the house*). As for the position and derivation of overt pre-copula subjects, I argue that they undergo a successive movement from their position in [Spec, vP] to the specifier position of SubjP through [Spec, AspP] and [Spec, TP] to satisfy the SoP feature on the head Subj. This movement results in copying the features of subjects in a chain of nodes which can be optionally spelled out as resumptive pronominals. I distinguish such optional resumptive pronominals from pronouns (which I will refer to as Prons later on) that obligatorily appear in copular deictic present tense sentences when the predicate is a definite nominal.

Chapter 6: The Double Preverbal Subject Constructions

After introducing verbal predicates in Chapters 3 and 4 then non-verbal predicates in Chapter 5, I focus this chapter's discussion on nominals that are followed by sentential predicates. These sentential predicates have another nominal in their preverbal position and obligatorily include a resumptive pronominal that is co-indexed with the first nominal. I refer to this construction of two preverbal nominals as the Double Preverbal Subjects (DPS). I refer to the first nominal in this construction as the outer nominal and the second as the inner nominal. I suggest that these preverbal nominals (the inner and the outer) are both subjects that are derived by successive movements to satisfy the SoP feature resulting in the copying of the phi-features of the moved nominal into the positions from which the nominal moved. Inner nominals undergo movement from postverbal subject positions leaving behind resumptive pronominal copies, one of which can optionally be spelled out. Outer nominals undergo movement from lower non-subject position (e.g. direct and indirect objects and possessors) leaving behind a resumptive pronominal copy that is obligatorily spelled out. In this chapter, I highlight my proposal that the [Spec, SubjP] is a recursive subject position that attracts any definite nominals carrying the interpreted

feature iSoP in the sentence. In sentences where more than one nominal moves, it is always the highest nominal that moves first to the closest [Spec, SubjP] position.

Chapter 7: Conclusion

This chapter provides a summary of the six chapters of the thesis. It summarizes the research findings and presents the unified account that I propose for preverbal subjects in Makkan Arabic in relation to three types of predicates, namely verbal predicates, nonverbal predicates and sentential predicates. This chapter also includes suggested topics for further research.

1.6 Conclusion

This introductory chapter presented the grammatical structure under study in this dissertation: that of preverbal subjects in Makkan Arabic. It highlights the fact that Arabic is one of the languages that allow SVO and VSO word orders and allows subjects to be null pronouns. In another relevant construction (the Double Preverbal Subject construction), clause-initial nominals can appear before a full sentence. Such a predication sentence has a second nominal in its preverbal position and obligatorily includes a resumptive pronominal that is co-indexed with the first nominal. The chapter presented three types of predication that can follow preverbal subjects: verbal, non-verbal and sentential predicates. The variety of Arabic under study, Makkan Arabic, has been described in terms of its basic morphological and structural properties. This chapter also stated the goal of the study, its significance and how it contributes to the study of Arabic syntax. Finally, an outline of the thesis was provided along with the summary and main findings of each chapter.

Chapter 2

Theoretical synopsis

2.1 Introduction

In this chapter, I introduce the syntactic theory and the theoretical assumptions on which I base my analysis of preverbal nominals in Makkan Arabic. I follow Chomsky's (2000, 2001, 2005) Minimalist Program (MP) and also build a major part of the analysis on Cardinaletti's (2004) subject-split approach. Cardinaletti's work is a development of Rizzi's (1997) CP-split, which has come to be known as the Cartography of Syntactic Structure. Finally, I make use of the assumptions introduced by the Distributed Morphology model (Halle and Marantz 1993, 1994; Embick and Noyer, 2007).

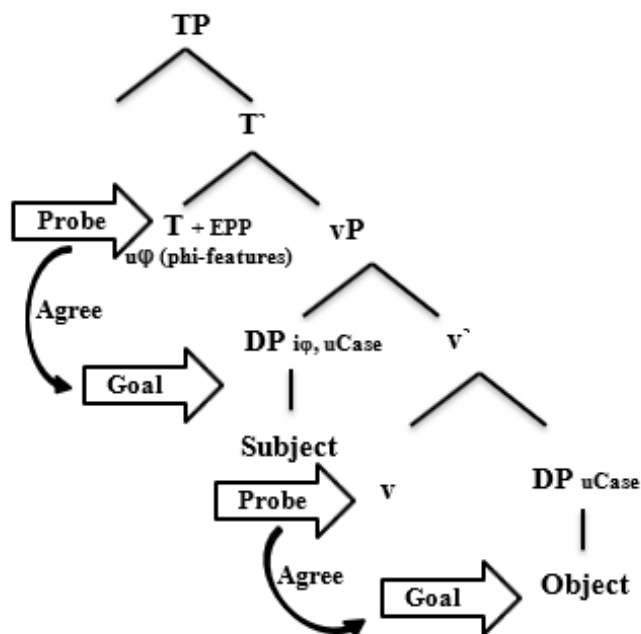
This chapter is organized as follows. In section 2.2, I discuss the basic assumptions of Chomsky's (2005) feature-inheritance approach. In section 2.3, I turn to Cardinaletti's (1997, 2004) cartography of syntactic structure and, specifically, the deconstruction of subject projection. I present the basic components of the Distributed Morphology approach in the derivation of words in section 2.4. In section 2.5, I outline the basic types of resumptives in the literature and briefly discuss resumptive pronominals as presented in this dissertation. In section 2.6, I lay out my basic assumptions for clause structure in Makkan Arabic, including checking of the EPP feature, subject movement, the syntax of tense and aspect, and the process of word formation. I present the clause structure of Makkan Arabic in section 2.6.5. Section 2.7 concludes the chapter.

2.2 Chomsky (2005): The Feature-Inheritance Approach

One of the most important assumptions that distinguishes the latest versions of MP is that movement is not necessary to check syntactic features of tense, Case and agreement. Rather, these features are checked as a result of the agreement relation, Agree, between probes and goals, as illustrated in (1). In other words, the operation Agree establishes a relation between probes

(i.e. functional heads such as T and v) and goals (nominal elements such as subjects and objects). Probes have uninterpretable agreement while goals have interpretable agreement features and unvalued Case features. The Agree relation is established between T and the subject, and between v and the object so that all the uninterpretable features are interpreted and valued. Consequently, the nominative Case feature on subjects and the accusative Case feature on objects are all valued. There are two important conditions for Agree to apply. First, both probes and goals must be ‘active’ in the sense that they have uninterpretable features that need to be interpreted by matching features. Another condition is that probes (or functional heads) c-command goals (or the nominals).

(1)



The major assumptions and developments of this approach are the following:

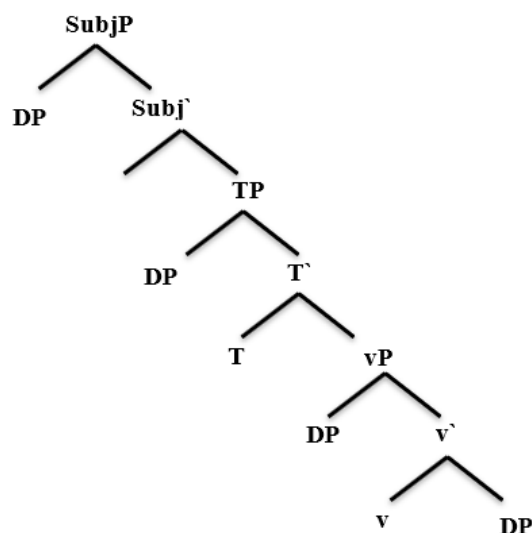
- **The Principle of Full Interpretation:** Only elements with interpretable semantic and phonological features can reach the interface levels, LF and PF. All uninterpretable unvalued features must be valued and deleted during the derivation prior to interface levels.

- **Agree operation:** The operation Agree establishes long-distance agreement between probes and goals to value agreement and Case features. Both probes and goals must be active; they must have unvalued features that need to be valued through matching with valued counterpart features. Also, the probe and the goal must be in a certain configuration: the probe establishes an Agree relation with the closest goal that it c-commands.
- **Move operation:** Chomsky (2004) replaces the operation Move by Internal Merge which takes place after applying the operation Agree. External Merge, in which elements are selected to be merged from the lexicon, takes place before Agree. For convenience, I will continue to use Move to refer to Internal Merge. Movement is restricted in this model as it can only be triggered by EPP features or Edge Features but not by agreement or Case features.
- **The Phase Theory:** Chomsky (2000 and later) argues that the derivation of clauses takes place phase by phase, and spell-out applies after each phase. After the completion of deriving each phase, the elements in that phase are not accessible to operations from higher phases. According to Chomsky, CP and vP are phases, but TP is not a phase. Only phase heads (i.e. C and v) can trigger syntactic operations (as Agree).
- **Feature Inheritance:** Phase heads C and v can transmit features to T and V, respectively. That is, TP is not a phase and does not have tense or agreement features. However, when TP is selected by C, T can inherit the features of C and they both, C and T, act as a complex probe that searches down for the goal.
- **A-positions vs. A-bar-positions:** According to Chomsky's (2005) Feature-Inheritance approach, A-positions and A-bar-positions are not distinguished by their structural status, but by the manner they are derived. Non-argument elements in A-bar-positions, such as the specifier of CP or the outer specifier of vP, are attracted directly by the edge features of a phase head. Arguments in A-positions, such as the specifiers of TP, are attracted indirectly by edge features that are inherited from the phase head C to T.

2.3 The Cartography of Syntactic Structure: Subject-Split Approach

A general property of null-subject languages is that subjects can occur preverbally or postverbally. Cardinaletti (2004) proposes two preverbal subject positions in Italian (and in all null-subject languages), a higher subject position and a lower subject position. She assumes that “the properties attributed to preverbal subjects (being the subject of predication, checking the EPP feature, checking phi-features, checking nominative case) can be distributed across discrete functional projections, each of which realizes a feature of a set of features” (P. 116). Cardinaletti argues that subjects in the higher subject position, the subject of predication in [Spec, SubjP], only check the subject of predication feature, and are not involved in checking nominative Case and the EPP feature. These features can be checked in the lower subject projection, TP. These two preverbal subject positions and postverbal positions are illustrated in (2).

(2)



Cardinaletti (1997) suggests that in each of these subject positions: [Spec, TP] and [Spec, SubjP], different types of subjects are hosted. Such differences are related to subjects being referential or non-referential, quantified or non-quantified and null or overt. Thus, overt preverbal subjects occupy [Spec, SubjP] while the position in [Spec, TP] is reserved for null and weak pronouns. Cardinaletti, among others, maintains that weak pronouns (e.g. null pronouns) cannot occupy postverbal position, nor can they occur in a position higher than full subjects. This

conclusion that there are two preverbal subject positions with each hosting different types of subjects is known as the Specialization Hypothesis. More about null subject position is discussed in Chapter 3.

Another distinction between the two preverbal subject positions that Cardinaletti (1997) proposes, other than the types of subjects hosted in these positions, is that XPs other than nominative DPs can occupy the specifier of SubjP. That is, any phrasal category can be a subject of predication such as PP or AP while [Spec, TP] can only be occupied by NPs or DPs. An additional distinctive property that Cardinaletti points at is that the subject of predication phrase is a recursive phrase, which means that there can be multiple subjects of predications in a sentence while [Spec, TP] is a unique position in the clause structure.

Cardinaletti employs the higher subject position [Spec, SubjP] to account for inverse copular sentences (3a) and constructions in which verbs appear with a dative experiencer (3b) or a locative argument as a subject (3c). The elements that are suggested to occupy the [Spec, SubjP] position are all subjects of predication.

- (3) a. La causa della rivolta sono Gianni e Maria.
 the cause of-the riot are Gianni and Maria
 ‘The cause of the riot are Gianni and Maria.’
- b. A Gianni piaceva molto la musica
 to Gianni pleased much the music
 ‘Gianna like music a lot.’
- c. Su Gianni cadde una grande disgrazia
 on Gianni fell a big fortune
 ‘A big fortune fell on Gianni.’

[Cardinaletti, 2004: 122-125]

A common assumption in the syntax of subjects is that preverbal subjects in non-null subject languages (like English) occupy [Spec, TP] in the inflectional domain while in null-subject languages (like Italian and Arabic), preverbal subjects occupy a peripheral position in the CP domain (Contreras 1991; Barbosa 1995; Alexiadou and Anagnostopoulou 1998; Ordóñez and Treviño 1999; among others). However, one of the main properties of Cardinaletti’s subject of

predication projection is that this projection occurs in the inflectional domain (IP or TP in recent terms) not the CP domain. Before laying out the two competing approaches in analyzing preverbal subjects in null-subject languages, I first define the inflectional domain and the CP domain, according to Rizzi's (1997) definitions, whose work is considered the foundation of the approach of the Cartography in Syntactic Structures.

Rizzi (1997) describes three structural layers (domains) that the representation of a clause consists of. First, there is the lexical domain (VP) which is headed by the verb and in which theta roles are assigned. Then there is the inflectional domain (IP/TP) which is headed by functional heads corresponding to concrete or abstract specifications on the verb and responsible for licensing case and agreement features. Finally, there is the complementizer domain (CP) which is headed by a free functional morpheme and hosts topics, interrogative and relative pronouns and focalized elements. Rizzi deconstructs the CP layer into four heads which are Force (ForceP), Finiteness (FinP), Topic (TopP) and Focus (FocP), which together are known as the left periphery. This split of CP was the foundation for the new approach, the Cartography of Syntactic Structures, in which simple sentence structure is deconstructed to map complex syntactic representations. Rizzi considers such work on breaking out the simple notion of CP to be following the leads of similar efforts that were directed to break out the Inflectional layer to more heads in the inflectional system as Agreement (AgrP), Tense (TP) and Aspect (AspP) (Pollock 1989, Cinque 1999, Chomsky 2001). Rizzi (1997) writes:

In the mid eighties, each layer was identified with a single X-bar projection (VP, IP, CP), but this assumption quickly turned out to be too simplistic. Under the impact of Pollock's (1989) influential analysis of verb movement, IP dissolved into series of functional projections, each corresponding to a single feature specification overtly or abstractly expressed on the verbal system (Agr, T, Asp, ...). Kayne's (1984) binary branching hypothesis naturally led to the postulation of multiple VP layers for multi-argument verbs, e.g. along the lines of Larson (1988) and much related work. Various proposals in the recent literature indicate that the complementizer layer should share the same fate: much more than a single X-bar scheme seems to constitute the left (pre-IP) periphery of the clause. (P. 281)

Cardinaletti (1997, 2004) argues that both preverbal subject positions, [Spec, TP] and [Spec, SubjP], are below Rizzi's (1997) lowest projection in the CP domain, which is FinP.

Cardinaletti's proposal of having two preverbal subject positions builds on McCloskey's (1997) suggestion to deconstruct the traditional category of subject into discrete functional projections. McCloskey argues against the notion that there is a unique canonical position in which all the properties and functions of subjects are clustered. Rather, the properties that are attributed to subjects such as checking the EPP feature, agreement phi-features, and nominative Case can be distributed across various syntactic positions. One of the main supports for this idea is the VP-Internal Subject Hypothesis (Koopman and Sportiche, 1991) in which the functions of the lexical and inflectional layers are separated. The VP-Internal Subject Hypothesis suggests that subjects are base-generated inside VP or, according to further developments in the hypothesis, in the specifier position of a functional projection (above VP) headed by a null verbal head: Voice (Kratzer 1996) or *v* (Chomsky 1995). External arguments are merged in this projection and are assigned semantic roles. Subjects are believed to raise to the inflectional domain, in [Spec, TP] to receive nominative Case and check phi-features (Chomsky, 1995, among others). This means that the specifier of TP is a derived subject position and that there are at least two derivationally-related subject positions in every language: [Spec, *v*P] and [Spec, TP]. However, recent versions of minimalism approach eliminate phrasal movements to [Spec, TP] to check case and agreement features and allow subjects to stay in situ.

Cardinaletti's (1997, 2004) assumptions are based on Italian but extend to other null-subject languages, including Standard Arabic. Following Cardinaletti's approach, Saeed (2016) argues that structural subjects in the lower position [Spec, TP] are derived by movement from [Spec, *v*P]. The subject of predication in the higher preverbal position [Spec, SubjP] is base-generated in this position and its Case is inherent rather than assigned by the head T. According to Saeed, employing the projection SubjP for Standard Arabic allows us to account for examples where two nominals appear before the verb as in the case of floating quantifiers (4a), emphatic reflexives (4b), and appositions (4c).¹¹ Both preverbal nominals are below CP because they can appear after the complementizer *ʔenna* for confirmation and *laʕalla* for probability as in (5).

¹¹ Saeed (2016) analyzes the two nominals in each of the three examples as separate constituents which occupy [Spec, TP] and [Spec, SubjP]. The nominals in each case could alternatively be considered to be a single constituent

- (4) a. al-awlad-u ajmaʕun ḥaḍar-u al-nadwat-a
the-boys-Nom all attended.3pl the-seminar.Acc
‘The boys all attended the seminar.’
- b. sayf-un nafsa-hu katab-a maqal-an
Sayf-Nom self-him wrote.3sg essay-Acc
‘Sayf himself wrote an essay.’
- c. copenhagen, al-asema jahidat ḥorob-an ʕadeeda
Copenhagen the-capital witnessed wars.Acc several
‘Copenhagen, the capital witnessed several wars.’
- (5) a. ʔenna al-awlad-a ajmaʕun ḥaḍar-u al-nadwat-a
Comp the-boys-Acc all attended.3pl the-seminar.Acc
‘Indeed, the boys all attended the seminar.’
- b. laʕalla sayf-an nafsa-hu katab-a maqal-an
Comp Sayf-Acc self-him wrote.3sg essay-Acc
‘Maybe, Sayf himself wrote an essay.’
- c. ʔenna Copenhagen, al-asema jahidat ḥorob-an ʕadeeda
Comp Copenhagen the-capital witnessed wars.Acc several
‘Indeed, Copenhagen, the capital witnessed several wars.’

[Saeed 2016: 136-139]

In this dissertation, I adopt Cardinaletti’s (1997, 2004) subject of predication projection and suggest that [Spec, SubjP] hosts preverbal subjects in Makkan Arabic. However, I depart from Cardinaletti’s suggestion that there is no Case assignment in the SubjP since Arabic does not allow non-nominative subjects as I discuss in Chapter 6. In sections (2.6.1) and (2.6.2), I show that subjects may undergo movement from lower argument positions, and that such a movement is not motivated to satisfy the EPP feature in Arabic.

2.4 The derivation of words: Distributed Morphology (DM)

This dissertation makes use of the assumptions introduced by Distributed Morphology (Halle and Marantz 1993, 1994; Embick and Noyer, 2007) as opposed to a Lexicalist approach (Chomsky

in which case the data would not clearly indicate a need for two distinct syntactic positions. I leave the question of whether they are one constituent or two for future research.

1981). In the Lexicalist approach, it is assumed that the derivation of words takes place in the Lexicon while the derivation of phrases and sentences takes place in syntax. The words that are derived in the Lexicon are the terminals of the syntactic derivation, and thus there is no direct relation between syntax and morphology.

An alternative non-Lexicalist approach to morphology is presented in the Distributed Morphology (DM) model where words, phrases and sentences are derived by syntax. In other words, the derivation of all complex objects (i.e. words, phrases, or sentences) is syntactic. Words are formed by the syntactic operations of Merge and Move and are not specified for category until they are selected by category-defining heads during syntax. The derived syntactic structures may be input for further operations at the interface levels, PF and LF. According to this approach, the relation between syntax and morphology is direct and transparent.

The units that undergo the syntactic operations of Merge and Move are called *morphemes*. Each morpheme is a complex of features that are either syntactic-semantic or phonological features. Syntactic terminals are of two kinds; *Roots (lexical morphemes)*, which are language-specific combinations of sounds and meaning, and *abstract morphemes (functional morphemes)*, which are composed of universal syntactic-semantic features. Syntactic-semantic features are abstract, and they are realized or spelled out at the PF stage. The operation of supplying the abstract morphemes with phonological features is called *Vocabulary Insertion*. The Vocabulary to be inserted is known as *the phonological exponent* that is usually paired with information about the grammatical environment. The phonological exponents together with their conditions on insertion are called *Vocabulary Items*. The DM approach is distinguished by three main properties.

- *Late Insertion (Realization/ Spell out)*: This means that terminal nodes, which are sites of insertion, are complexes of semantic and syntactic features that lack phonological features. After syntactic processes are over, the terminal nodes are supplied with the phonological features by the insertion of Vocabulary Items into these terminal nodes.
- *Underspecification*: Vocabulary Items are underspecified in the sense that the identifying features of the Vocabulary Items must be a subset of the features at the terminal nodes. In

other words, the Vocabulary Items may have differing levels of generality in their grammatical environment. By contrast, terminal nodes are fully specified for the identifying features. Accordingly, more than one Vocabulary Item might compete to be inserted into a terminal node. The Vocabulary Item that is the most specified gets inserted.

- *Syntactic Hierarchical Structure All the Way Down*: Terminal nodes at which Vocabulary Items are inserted are organized in a syntactic hierarchical structure determined by the principles and operations of syntax. The hierarchical structures from syntax might be modified further at the PF by morphological operations. The operations at the PF stage are motivated by language-specific requirements.

A simple example can be provided by English present tense inflection of main verbs. According to the DM approach, the Vocabulary Items (phonological exponents) for the Tense node in the English present tense are presented in (6).

- (6) a. [3 SG, PRES] ↔ -s
 b. [PRES] ↔ Ø

If the subject is third person singular, for example, then the features [3 SG PRES] will appear at the inflection node, and both exponents (-s, Ø) are eligible for insertion, and thus both compete for insertion. Since (6a) is more specific, it is the Vocabulary Item that wins the competition and gets inserted. It should be noted that the Vocabulary Items are understood as phonological underlying representations that are subject to further phonological rules.

In my analysis, I do not assume that words are derived in the Lexicon, but rather are derived by the syntactic operations of Merge and Move. The significance of this assumption lies in the realization of various morphological forms, including null elements. I assume that every terminal node is composed of syntactic-semantic features that are supplied with phonological forms later in the derivation. According to this perspective, the null elements as in null subjects or null copula verbs are abstract morphemes that lack phonological realizations.

2.5 Resumptive pronouns

There are two types of resumptive pronominals that differ in their association with their antecedents. The first type is described in the literature as True Resumption where the resumptive pronouns are related to their antecedents via a process similar to binding (Aoun, Choueiri and Hornstein 2001; McCloskey 2005; Haddad 2010). Such resumptives are merged in the positions in which they appear unlike the other type of resumption, known as Apparent Resumption, in which resumptives are related to their antecedents via movement. Such resumptive pronominals that result from movement are considered either from a stranding or a non-stranding perspective, as shown below.

There are various approaches that associate resumption with movement. One approach to account for the resumptive pronouns is the stranding approach, which is adopted by Aoun, Choueiri and Hornstein (2001) in Lebanese Arabic and Boeckx (2003) in cross-linguistic data. According to this approach, preverbal nominals first merge with the resumptive pronoun adjoined to them in their original position inside the clause. Then the nominals move to a higher position leaving the resumptive pronoun behind, i.e. stranded. A non-stranding approach to resumption suggests that the resumptive pronouns are the spell-out of the copy of the moved element (Haddad 2010, Alexandre 2012, Van Urk 2016). In both mechanisms, the stranding and the non-stranding approach, resumption is associated with movement. In other words, resumptive pronouns occupy the position of the moved elements.

In this dissertation, I adopt a non-stranding approach to resumption as I assume that moved nominals leave a copy that can be spelled out as a pronominal element. This spell out can be optional when nominals move from a lower thematic subject position or obligatory when nominals move from a lower non-subject position (e.g. direct or indirect object position).¹² I consider resumptive pronouns to be copies of a moved element although they are not full copies

¹² As pointed out by Hamid Ouali (p.c.) movement in Arabic does not always result in resumption. Focus movement, for example, leaves a gap that is not obligatorily spelled out as a resumptive pronoun. I speculate that this might be because fronted elements that have undergone focus movement retain their original Case whereas nominals that have undergone topicalization or subject movement have their original Case overridden. Obligatory resumption serves to preserve the original Case. I leave further exploration of this issue for future research.

of the moved nominal, but only a copy of its phi-features. This approach is embraced by Grohmann (2003) and Kandybowicz (2008) among others, who consider resumptive pronouns, reflexives and partial copies all to be realization of lower copies in movement chains. That is, when a nominal undergoes successive movement through multiple specifier positions, a copy of the moved element is left behind in all these positions, creating a movement chain, whose head is the moved nominal.

One important point that must be considered here is the phonological spell out of such resumptive copies, especially when there is more than one resumptive copy. According to Nunes (1995, 2000, 2004), the chain can only surface with one of the copies (chain links) being phonetically realized, which is usually the head of the chain, and all the other copies (except the head) must be deleted. Nunes refers to this process as Chain Reduction (7). Chain Reduction is thus an operation that deletes repeated copies to facilitate the spell out of the chain in the phonological component.

(7) Chain Reduction:

Deletion of all but one chain link in the phonological component (PF).

[Nunes, 1995: 21]

Under the Distributed Morphology framework that I adopt in this dissertation, I assume that deletion of repeated copies in the Chain Reduction constraint can be re-interpreted as the failure of spell-out to those repeated copies. In other words, when a nominal undergoes movements through multiple specifier positions leaving a copy of its phi-feature in each specifier position, only one of those resumptive copies can be spelled out, which is the head of the chain. According to Nunes's (2004) discussion, the existence of multiple-copy chains is guaranteed by the Copy Theory of Movement. It is the realization (or the lack of realization) of these copies that is problematic. In the computational system, all elements are considered distinct from each other unless they are specified as non-distinct by the Copy operation. This principle is referred to as the Non-distinctiveness of copies (8).

(8) Non-distinctiveness of Copies

All elements will be taken to be distinct for purposes of the computational system unless they are specified as non-distinct (but not identical) by the Copy operation.

[Nunes, 1995: 85]

To account for the lack of phonological spell-out of the chain links (copies), Nunes suggests that for the chain link to be realized, one link should be distinct from the others. By contrast, if multiple non-distinct links of a chain are phonetically realized at PF, the chain will fail, and the derivation will crash. However, Nunes does not eliminate the possibility of spelling out a second chain-link other than the head. By studying the morphological factors that may allow repetition at PF, Nunes suggests that language-specific circumstances can give rise to repetitions since there is an attested low frequency of multiple-copy spell-out cross-linguistically. According to Nunes, the Copy Theory must be supplemented with an account of the conditions that derive and constrain multiple copy spell-out. Chomsky (2005) also allows for the realization of multiple copies under some language-specific situations despite the human language faculty's orientation towards more economical processing which eliminates all but a single copy. Thus, spelling out a second copy of the moved nominal (in a movement chain) in addition to spelling out the head of the chain is an attested phenomenon in some human languages. In addition to that, Nunes briefly states that lower copies that are realized as (resumptive) pronouns, reflexives, or partial copies are considered distinct enough from the head of the chain which does not cause any problem for spell-out. In this dissertation, I present the situations in which the spell out of a second copy is either optional, when nominals move from lower thematic subject position (See Chapter 3) or obligatory, when nominals move from lower non subject positions (See Chapter 6).

2.6 Assumptions for Makkan Arabic

2.6.1 The EPP feature in Arabic

In older versions of the Minimalist approach, movement is motivated to check EPP, Case, and phi-features (Chomsky 1995). However, in the Agree-based approach, satisfying edge features like the EPP is the only motivation that triggers movement. Under this framework, the

EPP feature is uninterpretable, but it is not interpreted through matching with interpretable counterparts. Rather, it attracts an element to be moved, or internally merged, in the specifier position of the head, T, on which it appears. In this section, I first present a brief history on the development of EPP and then outline proposals in the literature regarding how the EPP feature is satisfied in Arabic before presenting my own assumptions.

Chomsky (1981, 1982) proposed the Projection Principle to account for the arguments that are obligatory in a sentence: “Representations at each syntactic level (i.e., LF, and D- and S-structure) are projected from the lexicon, in that they observe the subcategorization properties of lexical items” (Chomsky, 1981: 29). The Projection Principle was first known as Principal P:

Obligatory insertion of the NP follows from the fact that the constructions illustrated require subjects for some structural reason; call it the principal P. Clearly, P does not derive from theta-theory; the italicized elements bear no theta-roles. Nor does P derive from considerations of subcategorization. [...] The principle P, plainly, is the structural requirement that certain configurations - infinitivals and gerunds - must have subjects.

[Chomsky 1981: 26-27].

However, because this principle fails to account for the insertion of non-argument expletives in English, the Extended Projection Principle (EPP) is required to account for the obligatory presence of subjects in every sentence. The EPP represents one of the strongest assumptions in the generative theory of grammar and is posited to be a part of UG as it seems to hold in all languages. In null subject languages, i.e. those that do not have overt subjects such as Spanish, Italian and Arabic, Chomsky assumes that the EPP is satisfied by null *pro*. A later suggestion by Alexiadou and Anagnostopoulou (1998) argues for parametrizing the EPP in null subject languages such that it can be satisfied by verb movement to T. This proposal draws on the fact that the system of verbal morphology in pro-drop languages is rich and so allows null subjects to be identified.

There are four approaches in the literature on Arabic syntax regarding the EPP feature. Under the first approach, the EPP feature in Arabic is satisfied by overt movement of the subject from its thematic position to [Spec, TP]. This analysis is embraced by most Arabic scholars for SVO sentences (Mohammad 1990, 2000; Benmamoun 1992, 1998, 1999, 2000, 2008; Fassi

Fehri, 1993; Aoun et al. 1994; Ouhalla 1994; Harbert and Bahloul, 2002; Musbahien, 2008; Aoun et al. 2010; Al-Daher 2016; Al-Qahtani, 2016; Sahawneh 2017, among others). Aoun et al. (1994) and Aoun et al. (2010) extend this analysis to VSO sentences and argue that subjects overtly move to [Spec, TP] to satisfy EPP and receive nominative Case. To derive VSO order, they argue that verbs move to a position higher than TP. Under the second approach, the EPP is satisfied by movement of the inflected verb to the head T without the need for subject movement to [Spec, TP] (see, for example, Alexiadou & Anagnostopoulou 1998; see also Wurmbrand and Haddad 2016 who assume that EPP is satisfied indirectly by verb movement from v to T).

The third approach, following Chomsky's original assumption about EPP checking by *pro* in null subject languages, is the null expletive analysis by Mohammad (1990). Mohammad argues for the existence of a null expletive pronoun in [Spec, TP] in VSO sentences that satisfies the EPP requirement. A modified version of this assumption is adopted for Jordanian Arabic by Sahawneh (2017) in which EPP is satisfied by a null pronominal subject clitic in VSO sentences. A fourth approach argues that Arabic does not have an EPP feature in VSO sentences (Soltan 2006, 2007). Soltan suggests that postverbal subjects can remain in their base positions because there is no EPP feature on T in VSO sentences which influences semantic interpretation as well. "If this assumption is on the right track, then we have an explanation for the difference in interpretation between SV and VS orders in SA: EPP licensing in SV orders results in an LF reflex of *categoricalness*, whereas absence of an EPP feature in VS orders results in the default *thetic* interpretation" (Soltan 2006: 258). Basilico (1998: 546) explains this distinction between *thetic* and *categorical* interpretation as the following "(W)ith a categorial judgment, a particular individual is singled out and then some property is attributed to that individual. With a *thetic* judgment, our attention is drawn to the event itself and not the participants of the event to them". I do not discuss the distinction between *thetic* and *categorical* interpretations any further.

In this dissertation, I follow Alexiadou and Anagnostopoulou (1998) and Wurmbrand and Haddad (2016) who suggest that in pro-drop languages, including Arabic, the EPP feature is satisfied by verb movement to T.¹³ This analysis does not only apply to VSO sentences but also

¹³ I diverge from Alexiadou and Anagnostopoulou (1998) who assume that verb agreement is pronominal. I consider verb agreement to be the spell-out of the phi-features that have been interpreted and valued during derivation.

extends to SVO sentences. More specifically, I suggest that verb movement to T satisfies the EPP feature across all sentence types. That is, subject movement in SVO is not motivated to satisfy EPP, unlike the common assumption in Arabic that subject undergo movement to [Spec, TP] to satisfy EPP (Mohammad 1990, 2000; Benmamoun 1992, 1998, 1999, 2000, 2008; Fassi Fehri, 1993; Aoun et al. 1994; Ouhalla 1994; Harbert and Bahloul, 2002; Musbahien, 2008; Aoun et al. 2010; Al-Daher 2016; Al-Qahtani 2016; Sahawneh 2017, among others). With regard to copular present tense sentences which lack an overt copula verb, I follow Fassi Fehri (1993) in assuming that there is a null copula verb that satisfies the EPP. I account for the null copula within the framework of Distributive Morphology.

2.6.2 Subject movement in Makkan Arabic

In Makkan Arabic, as well as in other null-subject languages, subjects can appear as postverbal overt subjects or null pronouns. In such sentences, the EPP feature does not require subjects to move to the specifier of TP for the sentence to be grammatical, as explained above in section 2.6.1. In this dissertation, I diverge from most linguists working on Arabic who assume that subjects in SVO sentences undergo movement to [Spec, TP] to check the EPP feature or to receive nominative Case (Mohammad 1990, 2000; Benmamoun 1992, 1998, 1999, 2000, 2008; Fassi Fehri, 1993; Aoun et al. 1994; Ouhalla 1994; Harbert and Bahloul, 2002; Musbahien, 2008; Aoun et al. 2010; Al-Daher 2016; Al-Qahtani, 2016; Sahawneh 2017, among others). Instead, I argue that subjects in SVO move through [Spec, TP] and continue to [Spec, SubjP].

Building on Chomsky's (2005) model, I suggest the existence of another edge feature (other than EPP) which is SoP that motivates phrasal movement and is employed to derive SVO sentences in Makkan Arabic. I assume that the edge feature SoP is transmitted to SubjP from C, and that the uninterpretable feature uSoP on the head Subj is satisfied by having a nominal element with a matching interpretable feature iSoP moved to the specifier of SubjP. This phrasal movement is optional and is related to information structure in that it conveys which nominal the speaker perceives as more prominent. In other words, I do not assume that the SoP feature is a lexical feature in the same sense as gender features, for example. I assume that the SoP feature is

like Topic and Focus features in that it is relevant to the information structure and can therefore play a role in the order of constituents in a sentence. I consider that the most prominent nominal(s) (according to the speaker's organization of information) carries an interpretable SoP feature. This optional phrasal movement to [Spec, SubjP] is not unique as I suggest that the specifier position of the SubjP is a recursive position that can optionally attract any definite nominal that carries the interpretable iSoP in the sentence to be a subject of predication, whether such nominals are in lower thematic subject position or non-subject positions (e.g., objects).

One important characterization of such subject phrasal movement is that it is a successive movement as indicated earlier in section 2.5 while discussing resumptives. When thematic subjects move from [Spec, vP] to [Spec, SubjP], they move successively throughout the available specifier positions [Spec, AspP] and [Spec, TP], so that nominals move only to the closest site. These movements of thematic subjects to a preverbal subject position are discussed in detail in Chapter 3, 4 and 5. When non-subject nominals undergo movement to a preverbal position, in addition to the movement of thematic subject to preverbal subject position, two or more nominals undergo movement to the recursive preverbal subject position [Spec, SubjP]. Such movements always follow a fixed order in which thematic subjects (the highest nominals) move first to the closest/lowest [Spec, SubjP], then lower non-subject nominals move next to the higher [Spec, SubjP]. These movements are discussed in detail in Chapter 6.

The successive movements of thematic subjects through available specifier positions and the order in which nominals move when more than one nominal undergoes movement are both constrained by the Shortest Move principle. According to the early minimalist program of Chomsky (1993, 1995), all derivations are subject to the principles of economy, one of which requires a constituent to move from its source position to the nearest available position. This principle is known as the Shortest Move principle. Other corresponding derivational principles in later versions of minimalist syntax are the Minimal Link Condition (Chomsky, 1995) and Minimal Search (Chomsky, 2007), cf. Relativized Minimality (Rizzi 1990). The same principle is also informally referred to as "minimize chain links" (Chomsky and Lasnik, 1993) or "limit search space" (Chomsky 2000).

In describing this movement constraint, Chomsky (2000) lists many labels that this principle has received:

In the terms we are exploring, reasons are reduced to effects at the interface. Possibilities that have been investigated (if not in these terms) include constraints that bar PF vacuous overt movement and others that seek to limit effects on PF (Procrastinate). An LF counterpart is that covert operations are allowed only if they have an effect on interpretation at LF. Another category seeks to reduce "search space" for computation: "Shortest Movement/Attract." Successive cyclic movement (Relativized Minimality, Subjacency), restriction of search to c-command or minimal domains, and so on. Yet another imposes "local determinability" conditions (barring "lookahead," "backtracking," or comparison of alternatives).

[Chomsky, 2000:99]

Chomsky (2007) further discusses this concept from a biolinguistics perspective, suggesting that such a principle is derived by the general nature of human minds: "Recent work indicates that they may reduce in large measure to minimal search conditions of optimal computation, perhaps not coded in UG but more general laws of nature – which, if true, would carry us beyond explanatory adequacy to the domain of 'why' questions" [Chomsky, 2007: 11].

For ease of reference, I will refer to this constraint on such phrasal movements as the Shortest Move principle. I give this principle the definition in (9).

(9) Shortest Move Principle:

Nominals move from their source position to the nearest available position.

Another point regarding subject movement in Makkan Arabic is related to Case. In this dissertation, I assume that Case is valued on nominals as a reflex of the relation Agree as explained in section 2.2. above. I argue that non-subject nominals that receive accusative or genitive Cases in their first merged position can move to a clause-initial position in [Spec, SubjP]. However, because Arabic does not allow non-nominative nominals in subject positions, I suggest that after movement to [Spec, SubjP], the original Case of non-nominative nominals is overridden by the nominative Case valued by the Subj head that is transmitted from C. This suggestion is a departure from Cardinaletti's (2004) original proposal in which there is no Case

valuation in the SubjP (See section 2.3 for more details). In Romance languages (such as Italian and Spanish), dative subjects, for example, are grammatical. On the contrary, all subjects must be nominative in Arabic, and any non-nominative Case that nominals bear gets overridden. By adopting a movement approach in which nominals move from their base position in which they receive accusative Case to a preverbal subject position in which they receive nominative Case, I show that the movement chain can have more than one Case. I also show that phrasal movement from lower non-subject positions to preverbal subject positions is not motivated by Case since they already receive Case in their base position. This assumption is compatible with Cardinaletti's proposal that phrasal movement to [Spec, SubjP] is not motivated by Case.

In support of Cardinaletti's (2004) proposal of the Subject of Predication projection, Rizzi (2005) argues that the syntactic Case-agreement system should not be considered the only motivation for subject movements. In languages with dative subjects, for example, canonical subject positions are occupied by nominals that do not need nominative Case and may not trigger verbal agreement. Rizzi explains that subject movement is rather motivated by discourse-related features and suggests refining the EPP hypothesis; "Such a featural characterisation must be broader than one merely involving a reference to phi-features, as the capacity of attraction that this position has extends beyond the capacity of the head responsible for the Case-agreement system: not only nominative subjects triggering verbal agreement may be attracted to Spec Subj, but also other elements, with a certain amount of cross-linguistic variability" (Rizzi, 2005, 212).

A final point about optional movement that is motivated by pragmatic SoP feature concerns its status as A or A-bar movement. According to Chomsky (1995), A-movement is driven by phi-features while A-bar-movement is driven by Focus/Topic features. In this dissertation, I argue that although subject movement is motivated by the pragmatic SoP feature, the landing site of the movement is an A-position. The proposal that A-movement can be triggered by discourse has precedents in the literature. Miyagawa (2010) suggests that movement in Japanese is triggered by Focus/Topic features, and the moved elements may end up either in [Spec, TP] or in a second position above TP and below CP. Miyagawa calls this projection α P. The position is proposed to host various elements and is given various names which is why Miyagawa chooses a flexible term for the projection, namely α P, instead of FocP or TopP, for

instance. Additionally, since preverbal nominals undergo movement that is indirectly triggered by a feature that is inherited from C and not directly by a feature on C, preverbal nominals are in an A-position, according to Chomsky's (2005) characterization of A-positions.

2.6.3 Tense and Aspect in Makkan Arabic

Tense and Aspect are usually associated with verbal projections. There are two verb forms in Arabic which, for convenience, I will refer to as perfective and imperfective verbs. Each of these two forms inflects for person, gender and number in Arabic (See Chapter 1 for more details on verb forms in Makkan Arabic). I assume, following Benmamoun (1999) and Aoun et al. (2010), that while the morphological inflections on Arabic perfective and imperfective verbs encode agreement with person, number and gender, they do not encode Tense nor Aspect. To support this assumption, the distribution of the imperfective form in Makkan Arabic is shown to encode an event in present tense (10a), to appear after a future-tense marker *raaḥ* (10b) and to be embedded after the past-tensed verb *abġa* 'I want' (10c).¹⁴

- (10) a. ana **a-kallem** omm-i kol yom
 I 1-call.imperf.sg mother.sg.-1.sg every day.sg
 'I call my mother everyday.'
- b. raah **a-kallem** omm-i bokra
 FUT 1-call.imperf.sg mother.sg.-1.sg tomorrow
 'I will call my mother tomorrow.'
- c. beġe-et **a-kallem** omm-i bas ma-gedert
 want.perf-1.sg 1-call.imperf.sg mother.sg.-1.sg but NEG-was not able.perf.1.sg
 'I wanted to call my mother, but I couldn't.'

This assumption is contrary to the common one made in traditional Arabic grammar and by some modern linguists that perfective forms encode the past tense while imperfective forms encode present or non-past tenses (Sibawayh 1997, Binnick 1991, Fassi Fehri 2012, El-Sadek, 2014). It has also been suggested that the two verbal forms encode Aspect not Tense (Fleisch 1979). This

¹⁴ The data here are my own Makkan Arabic equivalents for the data presented in the cited work.

suggestion has led a few researchers to assume that Arabic is a purely aspectual language in the sense that it lacks a Tense projection, a view that Fassi Fehri (2004) specifically argues against. He maintains that Tense and Aspect can both be inferred from the inflections on verbal forms in Arabic (see also Fassi Fehri 1993, Tucker 2010).

Although I assume that Arabic verbal forms do not encode Tense nor Aspect, I include Tense and Aspect in the clause structure of Arabic sentences. With regard to Tense, I follow Aoun et al. (2010) in assuming that Tense is an abstract morpheme based on the observation that Arabic sentences can induce various temporal interpretations such the present tense, the past tense, and the future tense, without employing any time expressions such as *yesterday* and *tomorrow*. However, unlike Aoun et al. and Chomsky (1995, 2000, 2001) who suggest that tense feature is generated in T, I follow Chomsky (2005) that tense feature and phi-features are generated in C then transmitted to T. As for the aspect feature, I assume that it is introduced by the projection Aspect Phrase (AspP) in which the head is specified for $[\pm \text{ PERF}]$ feature. The head Asp, in combination with lower functional heads collectively spell out verbs as will be shown below. In the case of copular verbs, the head Asp is shown to be specified for deictic feature which determines the spell out of null copula verbs (more on the null copula is discussed in Chapter 5).

2.6.4 Word formation in Makkan Arabic

In Arabic, words are derived following the Root-and-pattern approach in which consonantal Roots are inserted into various templates that dictate the orders and types of the inserted vowels. Some derivational affixes may be employed as well. Templates usually distinguish different word classes such as nouns, verbs and adjectives. Consider the various patterns to derive different words from the Root *KTB* ‘to write’ in Table 11 below.

Templatic Pattern	Word	Meaning
CaCaC	KaTaB	he wrote
yaCCuC	yaKTuB	he writes
CaCaC	KiTāB	a book

CaCiC	KaTiB	a writer
maCCuC	maKTuB	a letter
maCCaC	maKTaB	an office/a desk
CuCiC	KuTiB	was written
CaaCaC	KaaTaB	he corresponded

Table 11: Root-and-pattern system in Arabic

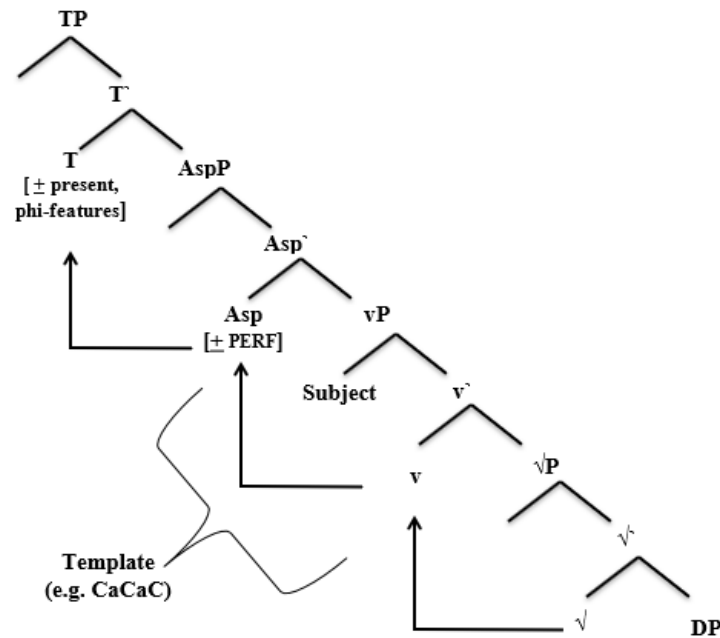
I adopt the DM approach to word formation and assume that words are derived from category-neutral Roots that combine with a category-defining head. In the case of verbs, Root Phrases ($\sqrt{P}$) carry the core meaning and introduce the internal arguments (e.g. direct objects). The little *v* head is a verbalizing functional head, and the *vP* projection introduces the external argument that is merged in the specifier of *vP* (Chomsky 1995; Harely 1995, among others).¹⁵ Following Azhari (2019) and Azhari and Ghomeshi (2019) on the morphology of Makkan Arabic, I assume that the pattern in which Roots are realized is determined by the feature bundles that are clustered on the head *Asp* by head movement of the verb from *v* to *Asp* and then to *T*.¹⁶ Recall that the head *Asp* bears the feature [$\pm$ PERF] and the head *T* carries the phi-features of person, gender and number (in addition to the EPP feature). These features collectively provide Roots with the templatic patterns during spell-out, as shown in (11).¹⁷

¹⁵ Kratzer 1996, among others assumes that external arguments are introduced in a VoiceP whose head bears the voice feature [$\pm$ ACTIVE] whereas Chomsky (1995), among others, maintains that external arguments are produced in the *vP* projection. Since this distinction is not relevant to the current dissertation, I assume that external arguments are introduced in *vP*.

¹⁶ Azhari (2019) and Azhari and Ghomeshi (2019) suggests an extra VoiceP which introduces the feature [$\pm$ ACTIVE] while the head *v* only verbalizes the RootP. In this dissertation, I assume that the head *v* also determines if the external argument is generated or demoted for the sake of simplifying the tree diagrams since the addition of the feature or the projection of VoiceP does not make any difference for the current dissertation.

¹⁷ I am not including whichever phi-features there might be on *v* to keep the trees easier to read and because they do not bear on the main questions I am exploring in this dissertation.

(11)



2.6.5 Clause Structure in Makkan Arabic

According to the previously stated assumptions with regards to the clause structure of Makkan Arabic, root finite sentences include the following projections:

- $\sqrt{P}$: It is the projection that includes the Roots from which words are derived and that carry the semantic components of meaning. The internal arguments are introduced in $\sqrt{P}$.
- vP : The Root moves from $\sqrt{}$ to the head v which verbalizes the Roots. The external argument is merged in the specifier of vP and assigned thematic role. The head v initiates an Agree relation between v and the internal argument, the nominal that is c-commanded by v (i.e. objects). As a result, objects get their accusative Case feature valued. In VSO sentences, subjects stay in the specifier position of vP .
- $AspP$: The head Asp bears the feature $[\pm PERF]$. Verbs move from v to Asp . The functional head v and Asp collectively provide the templatic pattern to spell out the verb. The feature [deictic] can also appear on Asp to encode deictic present tense.

- TP: The EPP, the uninterpretable phi-features and the interpretable Case features are inherited from C to T. Verbs undergo head movement from v to T and as a result of this movement, the EPP feature on T is satisfied. An Agree relation is initiated between T and the closest nominal c-commanded by T (i.e. subject). Subjects in [Spec, vP] receive the nominative Case.
- SubjP: The specifier position of SubjP is a recursive subject position. The edge feature SoP and the nominative Case feature are transmitted from CP to SubjP projection. The uninterpretable edge feature uSoP can optionally attract any definite nominal that carries the interpretable iSoP feature to undergo phrasal movement to the specifier of SubjP. Nominative Case is valued on the subject by the head Subj. When more than one nominal undergoes movement to [Spec, SubjP], movements are constrained by Shortest Move so that the highest nominal moves to the closest [Spec, SubjP] position. The nominative Case feature is transmitted from C to Subj, and this Case can override the structural accusative or genitive Case that nominals may bear.
- CP: The phase head C has the phi-features and edge features.

In copular sentences, I assume that the head V_{COP} (Arad 1998; Azhari, 2019, among others), which is one type of verb, dictates the type of complements that are selected by the copular verbs.¹⁸

2.6 Summary and conclusion

In this chapter, I have presented the theoretical assumptions that I adopt in the dissertation. I started with explaining the components of the feature-inheritance approach of Chomsky (2000, 2001, 2005) since my analysis of preverbal subjects in the clause structure is cast within this

¹⁸ Azhari (2019) presents results that provide support for the proposals of different flavors of little v (Arad 1998; 2002; Alexiadou et al. 2006; McGinnis 2000; Van Gelderen 2014) and different Root types (Embick 2004a; Alexiadou 2010; Alexiadou et al. 2006; Alexiadou et al. 2015). In this dissertation, I suggest the little v with copula flavor which encodes the predication relation between the external argument and the complement of the copula.

framework. I then introduced the cartography approach which is inspired by Rizzi's (1997) CP-split and then applied to subjects by Cardinaletti (1997, 2004). Cardinaletti proposes splitting the subject projection and deconstructing the properties of subjects to separate projections. I also discussed the Distributed Morphology framework which I employ to derive words and account for null copulas. I finally sketched out my main assumptions regarding the clause structure in Makkan Arabic.

Chapter 3

Null and Postverbal Subjects

3.1 Introduction

Arabic is a null-subject language in the sense that subjects, in addition to being overt in SVO word order, have also the option of not being overt but understood from agreement on verbs or being overt in VSO word order. These two options for the subject are not available in non-null-subject languages like English in which overt subjects obligatorily appear in SVO word order. In the current chapter, I discuss subjects in VSO sentences and in sentences that lack overt subjects. I consider subjects in VSO as occupying the specifier of vP while I consider sentences that lack overt subjects as involving null pronouns in the postverbal subject position [Spec, vP]. I dedicate most of this chapter to discussing two types of subjects that occupy [Spec, vP], null pronouns and overt subjects.

Under the assumption that the EPP feature is satisfied by verb movement from v to T (See section 2.5.1 for details), I assume that in VSO sentences, subjects stay in their merged position in [Spec, vP], and that null subjects occupy the same position in [Spec, vP]. Under the Agree-framework (Chomsky 2000, 2001, 2005), Case and agreement features are valued through the operation Agree that is established between probe T and the nominal goal in [Spec, vP]. This entails that [Spec, TP] does not host subjects in Makkan Arabic, unlike proposals for languages like English. I base my argument on the appearance of optional resumptive pronominals in SVO sentences in the lower subject positions [Spec, vP], [Spec, AspP] and [Spec, TP]. I suggest that these positions represent a movement chain, and that preverbal subjects undergo a successive movement to a higher subject position above TP leaving pronominal copies of their phi-features behind.

This chapter proceeds as follows. In section 3.2, I discuss null-subject sentences in Makkan Arabic and argue that null pronouns in Makkan Arabic occupy [Spec, vP] position. In section 3.3, I discuss VSO word order in Makkan Arabic. After laying out the distribution of

postverbal subjects in section 3.3.1, I argue in section 3.3.2 that VSO sentences in Arabic are derived by verb movement from *v* to *T*, which satisfies the EPP feature, while subjects stay in situ. I dedicate section 3.4 to arguing that [Spec, TP] does not host subjects in Arabic, but it is a position that subjects pass through, in addition to [Spec, AspP], while moving from [Spec, *v*P] to [Spec, SubjP]. I summarize the main points covered in this chapter in section 3.5.

3.2 Null-subject sentences in Makkan Arabic

Arabic does not require an overt subject in every clause. Instead, the features of the subject can be recovered from the agreement inflection on the verbal forms. Following numerous Arab linguists (Soltan 2006, 2007; Al-Horais 2009; Al-Baluashi 2011; Fassi Fehri 2012; AlAlamat 2014; Abdulrahman 2015), I assume that there are null pronouns in sentences that lack overt subjects in Makkan Arabic. In the following examples, the perfective and imperfective forms of the intransitive verb *sleep* show agreement for first person (1), second person (2) and third person (3) depending on the features of the null subject. Note that there is no gender distinction in the first-person forms and the plural forms of the second and third person.

- | | | | | | |
|--------|--|----------------|----|---|----------------|
| (1) a. | a-nam
1-sleep.imperf.sg
'I sleep early.' | badri
early | b. | num-t
sleep.perf.1.sg
'I slept early.' | badri
early |
| c. | ne-nam
1.pl.sleep.imperf
'We sleep early.' | badri
early | d. | num-na
sleep.perf-1.pl
'We slept early.' | badri
early |
| (2) a. | te-nam
2-sleep.imperf.sg.m
'You (M) sleep early.' | badri
early | b. | num-t
sleep.perf-2.sg.m
'You (M) slept early.' | badri
early |
| c. | te-nam-i
2-sleep.imperf-sg.f
'You (F) sleep early.' | badri
early | d. | num-ti
sleep.perf-2.sg.f
'You (F) slept early.' | badri
early |
| e. | te-nam-uu
2-sleep.imperf-pl
'You (Pl.) sleep early.' | badri
early | f. | num-tu
sleep.perf-2.pl
'You (Pl.) slept early.' | badri
early |

- | | | | | | |
|--------|---|----------------|----|---|----------------|
| (3) a. | ye-nam
3-sleep.imperf.sg
'He sleeps early.' | badri
early | b. | nam
sleep.perf.3.sg.m
'He slept early.' | badri
early |
| c. | te-nam
3.f-sleep.imperf.sg
'She sleeps early.' | badri
early | d. | nam-at
sleep.perf-3.sg.f
'She slept early.' | badri
early |
| e. | ye-nam-uu
3-sleep.imperf-pl
'They sleep early.' | badri
early | f. | nam-uu
sleep.perf-3.pl
'They slept early.' | badri
early |

Most linguists posit that in null-subject languages like Arabic, there are null pronouns that occupy the subject position in sentences that lack overt subjects (Chomsky 1982, 1995; Holmberg 2005, 2009; Soltan 2006, 2007; Al-Balushi 2011; Fassi Fehri 2012, among others). Nevertheless, the position that null pronouns occupy in the sentence, the features that characterize null pronouns and how null pronouns are licensed remain all questionable. Chomsky (1982) assumes that null *pro* is an empty non-specific element that occupies an argument position but needs to be licensed by the phi-features on T (or Infl). However, if rich agreement can license null *pro*, then why do languages with rich agreement such as Finnish, not allow null subjects (Holmberg, 2009; Doner, 2019). By contrast, why do languages such as Japanese and Chinese, which lack morphological agreement and thus have no phi-features on T, allow null pronouns?¹⁹ Miyagawa (2010) and Yang (2013) who both work on 'agreementless' languages (in Miyagawa's terms) such as Japanese and Chinese, argue for the existence of a Focus/Topic feature at C which has a similar function to phi-features in allowing null *pro*. Miyagawa extends this proposal and suggests expanding the category of phi-features and making it more abstract to include features such as Focus/Topic in agreementless languages.

Holmberg (2005) argues that the assumption that null *pro* is an empty category is inconsistent with the Minimalist framework. More specifically, the head T, which inherently lacks interpretable phi-features cannot identify null *pro*. Holmberg suggests two hypotheses to

¹⁹ Camacho (2013) and Doner (2019) explain that there are many factors that are responsible for licensing and identifying null *pro* in null-subject languages such as information structure, and register. Doner emphasizes the importance of the left-periphery in licensing null subjects.

solve this problem. First, the head T has interpretable phi-features which implies that the inflection on the verb is not agreement but rather pronominal arguments that are incorporated on the verb. Alternatively, Holmberg suggests that null *pro* is not empty but is rather specified with phi-features, so that it is like a pronoun in all respects except that it is phonologically null. He also suggests that this null subject *pro* occupies [Spec, TP] subject position.

Most Arabic linguists who explore null pronouns assume that it is an empty category (Soltan 2006, 2007; Al-Baluashi 2011; Fassi Fehri 2012, among others). AlAlamat (2014), following the same approach, argues that verbs in Arabic move from v to TP to check EPP, then move again to AgrP to check the features of the empty null subject *pro*. An alternative viewpoint is suggested by Abdulrahman (2015) who, partially following Holmberg (2005), assumes that in Standard Arabic and Tihami Yemeni Arabic, the null subject *pro* is a pronoun with interpretable phi-features that lacks phonological realization. Abdulrahman departs from Holmberg's proposal regarding the position of null *pro*. While the latter suggests that null *pro* occupies [Spec, TP] as pointed out above, Abdulrahman, following numerous Arabic studies (Soltan 2007; Al-Horais 2009; Al-Balaushi 2011) argues that in Arabic, null *pro* is in [Spec, vP].

I consider the analysis of Abdulrahman (2015) to be the most plausible analysis for the position and features of null pronouns in Arabic. Thus, following Holmberg (2005) and Abdulrahman (2015), I assume that null pronouns are specified with phi-features like overt pronouns except that they are phonologically null. As for the position of null pronouns in Arabic, I follow the commonly-adopted assumption in Arabic syntax that null pronouns stay in [Spec, vP]. It is expected that null pronouns occupy [Spec, TP] in languages like English, in which EPP is satisfied by an element merged (internally or externally) into [Spec, TP]. However, the assumption that EPP is satisfied by verb movement to T in languages like Arabic renders the movement of the null pronoun to [Spec, TP] unnecessary.

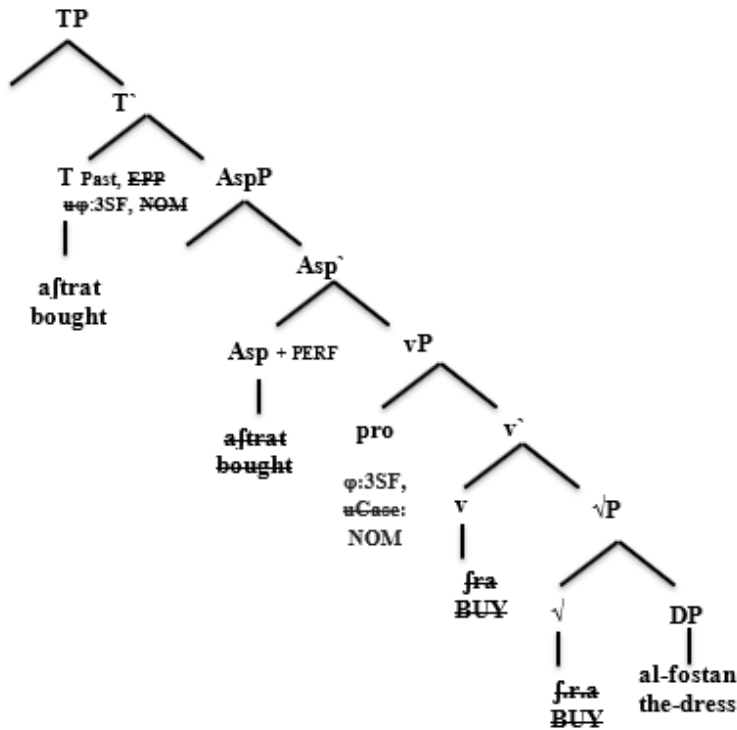
This assumption that null pronouns stay in situ appears to contradict what Cardinaletti (1997, 2004) proposes regarding the position of null *pro* in null-subject languages. Cardinaletti assumes that null pronouns are not allowed to stay in [Spec, vP] but must move to a preverbal subject position in [Spec, TP] which is preserved for weak and null subjects. However, this proposal is based on older Chomskyan approaches in which movement of subjects to [Spec, TP]

is motivated to check Case and agreement features in a Spec-Head configuration. Within this framework, [Spec, TP] is the only position in which nominative Case is assigned. Thus, all nominals and pronominals, including null pronouns, must undergo movement from [Spec, vP] to [Spec, TP] to have their Case and agreement features checked. Cardinaletti argues that whereas null and weak subjects stop in [Spec, TP], strong subjects continue to a higher subject position in [Spec, SubjP]. In the Agree-based approach, however, movement is not required to check Case and agreement features, and subjects have their uninterpretable Case features valued in situ. Since I assume that the EPP, which is an edge feature that can motivate movement, is satisfied by verb movement to T, null subjects do not have to move to [Spec, TP].

By definition, null-subject sentences lack overt subjects; however, some Arab linguists argue that null pronouns may co-occur with overt subject nominals in Arabic. For example, Soltan (2006, 2007) and Al-Balushi (2011, 2012) argue that a null pronoun occupies [Spec, vP] in SVO sentences because the preverbal nominal is not a subject. Rather, it is a left-dislocated topic that is co-indexed with the null subject pronoun in the postverbal position. Others have suggested that a null subject pronoun occupies [Spec, TP] in VSO sentences to check the EPP feature (Aoun et al. 1994, Ouhalla 1994, Mohammad 2000, Sahawneh 2017, among others). In this dissertation, I argue against both positions: I consider preverbal nominals, like postverbal nominals, to be genuine subjects, which eliminates the need to have null pronouns in SVO sentences, and I assume that the EPP feature is always checked by verb movement, which eliminates the need to have a null pronoun in VSO sentences. I illustrate the derivation of a sentence involving a null pronoun like (4a) in (4b):

- (4) a. aftr-at al-fostan
 buy.perf-3.sg.f the-dress.sg.m
 ‘(She) bought the dress.’

b.



To derive the sentence in (4a) according to the assumptions of this dissertation, the Root *f.r.a* ‘BUY’ combines first with the internal argument then it moves to the verbalizing head *v* to derive the verb *f.ra* (which does not receive the template for perfective form yet) and also generate the external argument in the specifier of *vP* (Koopman and Sportiche 1991, Halle and Marantz 1993, 1994; Embick and Noyer, 2007). The verb moves from *v* to *T* to check the EPP feature, passing through the head *Asp* which carries the [+PERF] feature and supplies the verb with the template that spells out the verb (I discuss verb movement in Arabic in section 3.3.2 below in more details). The probe head *T* has uninterpretable agreement features (*uφ*) which are inherited from *C*. The *C-T* complex probes down for a nominal goal. The subject pronoun (which is later realized as a null pronoun, and which I label as *pro* in the diagram for simplicity) has unvalued Case features (*uCase*) and interpretable phi-features (*φ:3SF*).²⁰ Agree is established between *T*

²⁰ According to the Distributed Morphology approach, overt pronouns and null pronouns are equally represented during derivation by the phi-features. In spell-out or Vocabulary Insertion, pronominal forms are inserted in the case of overt pronouns while a null element $\emptyset$ is inserted in the case of null pronouns. For clarity and ease of reference, I represent null pronouns as *pro* in the derivation.

and *pro* to interpret the agreement features on T (the probe) and value the nominative Case feature on the subject (the goal).

3.3 Spec, vP: Postverbal Subject Position

In this section, I first present the distribution of postverbal subjects in VSO sentences. Then I discuss the basic elements of the analysis that I adopt for VSO sentences, primarily focusing on verb movement.

3.3.1 The distribution of postverbal subjects in Makkan Arabic

Almost all nominal categories can occur freely in postverbal subject position after intransitive and transitive verbs without restrictions. In the following examples, the categories of proper nouns (5), subject pronouns (6) and definite nominals (7) can all occur in postverbal position. In addition, definite plural nominals can be preceded by quantifiers such as *kol* ‘all’ and *moʕzam* ‘most’ as shown in (8) and (9).

- | | | | | |
|---|---|--|--|------------------------------|
| (5) a. nam-at
sleep.perf-sg-f
‘Nada slept.’ | nada
Nada | b. akal-at
eat.perf-sg-f
‘Nada ate the apple.’ | nada
Nada | al-tofaḥ-a
the-apple.sg.f |
| (6) a. nam-at
sleep.perf-sg-f
‘She slept.’ | hya
3.sg.f | b. akal-at
eat.perf-sg-f
‘She ate the apple.’ | hya
3.sg.f | al-tofaḥ-a
the-apple.sg.f |
| (7) a. nam-at
sleep.perf-sg-f
‘The girl slept.’ | al-bent
the-girl.sg.f | b. akal-at
eat.perf-sg-f
‘The girl ate the apple.’ | al-bent
the-girl.sg.f | al-tofaḥ-a
the-apple.sg.f |
| (8) a. nam-u
sleep.perf-pl-m
‘All the girls slept.’ | kol al-banat
all the-girl.sg.f | b. akal-u
eat.perf-pl-m
‘All the girls ate the apple.’ | kol al-banat
all the-girl.pl.f | al-tofaḥ-a
the-apple.sg.f |
| (9) a. nam-u
sleep.perf-pl-m
‘Most of the girls slept.’ | moʕzam
most
al-banat
the-girl.sg.f | | | |

- b. akal-u **moʃzam** **al-banat** al-tofaḥ-a
eat.perf-pl-m most the-girl.pl.f the-apple.sg.f
'Most of the girls ate the apple.'

In addition to definite nominals, indefinite nominals are also allowed in the postverbal position, whether they are bare indefinite nominals in singular or plural forms (10) or modified by adjectives (11) or numerals (12). Although Arabic lacks the indefinite determiner that is equivalent to *a/an* in English, the numeral element *waḥda* ‘one’ delivers the same semantic content. Indefinite nominals that are quantified with *kaza* ‘few’ and *kol* ‘each/every’ can also appear in the postverbal subject position. These quantifiers *kaza* ‘few’ and *kol* ‘each/every’ are followed by singular indefinite nominals as shown in (13) and (14). In the case of quantified nominals with *kaza* (13), the verb either bears singular feminine agreement that matches *bent* ‘girl.sg.f’ or plural agreement which is always masculine to match the quantified phrase *kaza bent* ‘few girls’ as a whole.

- | | | | | | | | | |
|---------|--|---------------------------|---------------------------|---|---|------------------------------|---------------------------|------------------------------|
| (10) a. | nam-at
sleep.perf-sg-f
'A girl slept.' | bent
girl.sg.f | b. | akal-at
eat.perf-sg-f
'A girl ate the apple.' | bent
girl.sg.f | al-tofaḥ-a
the-apple.sg.f | | |
| c. | nam-u
sleep.perf-sg-f
'Girls slept.' | banat
girl.sg.f | d. | akal-u
eat.perf-sg-f
'Girls ate the apple.' | banat
girl.pl.m | al-tofaḥ-a
the-apple.sg.f | | |
| (11) a. | nam-at
sleep.perf-sg-f
'A little girl slept.' | bent
girl.sg.f | ṣāgeera
little | b. | akal-at
eat.perf-sg-f
'A little girl ate the apple.' | bent
girl.sg.f | ṣāgeera
little | al-tofaḥ-a
the-apple.sg.f |
| (12) a. | nam-at
sleep.perf-sg-f
'One girl slept.' | waḥda
one.sg.f | bent
girl.sg.f | b. | akal-at
eat.perf-sg-f
'One girl ate the apple.' | waḥda
one.sg.f | bent
girl.sg.f | al-tofaḥ-a
the-apple.sg.f |
| c. | nam-u
sleep.perf-pl-m
'Three girls slept.' | talata
three | banat
girl.pl.f | d. | akal-u
eat.perf-pl-m
'Three girls ate the apple.' | talata
three | banat
girl.pl.f | al-tofaḥ-a
the-apple.sg.f |
| (13) a. | nam-at/u
sleep.perf-sg-f/pl
'Few girls slept.' | kaza
few | bent
girl.sg.f | b. | akal-at/u
eat.perf-sg-f/pl
'Few girls ate the apple.' | kaza
few | bent
girl.sg.f | al-tofaḥ-a
the-apple.sg.f |

- (14) a. *nam-at* ***kol bent*** b. *akal-at* ***kol bent*** *al-tofaḥ-a*
 sleep.perf-sg-f every girl.sg.f eat.perf-sg-f every girl.sg.f the-apple.sg.f
 ‘Every girl slept.’ ‘Every girl ate the apple.’

The negative quantifier *wala* ‘not a/no’ can also precede indefinite singular nominals in postverbal position (15). When a quantified phrase such as *wala-bent* ‘no girl’ is postverbal, an obligatory negation particle *ma* ‘not’ appears before the verb. The bare negative quantifier *mahad* ‘nobody’ is the only category that cannot occur in postverbal position and is restricted to preverbal position (16). I argue in Chapter 4 that *mahad* is a shortened existential construction that is grammatical only in preverbal subject position.

- (15) a. *ma nam-at* ***wala-bent*** b. *ma akal-at* ***wala-bent*** *al-tofaḥ-a*
 NEG sleep.perf-sg-f no-girl.sg.f NEG eat.perf-sg-f no-girl.sg.f the-apple.sg.f
 ‘No girl slept (Lit: Not a girl slept)’ ‘No girl ate the apple.’
- (16) a. **nam* ***mahad*** b. **akal* ***mahad*** *al-tofaḥ-a*
 sleep.perf-sg-m nobody eat.perf-sg-m nobody the-apple.sg.f
 ‘Nobody slept.’ ‘Nobody ate the apple.’

As observed in the examples above, VSO sentences in Makkan Arabic are relatively unrestricted in terms of the nominal categories that can appear in postverbal subject position. Additionally, verbs show full agreement with their subjects in terms of number, gender and person.²¹ This agreement pattern is different from, and commonly confused with, that of Standard Arabic which is known to have an agreement asymmetry. The verbal agreement system in Standard Arabic is believed to be influenced by word order, so that verbs show only partial agreement with their subjects in VSO order while in SVO and null-subject sentences, verbs bear full agreement, (Mohammad 1990, 2000; Fassi Fehri, 1993, 1996, 2005; Aoun et al. 1994; Ouhalla 1994; Benmamoun 1996, 2000, 2017; Shlonsky 1997, Aoun and Benmamoun 1999, Harbert and Bahloul, 2002, Abdel-Hafiz 2005, Soltan 2006, 2007, Benmamoun and Lorimor, 2006, Musbahien 2008, Aoun et al. 2010, Fakih 2016, Sahawneh 2017, among others). There are many analyses in the literature that seek to unify the asymmetry in Standard Arabic and the lack of

²¹ The feminine plural agreement morpheme is lost on verbs in Makkan Arabic although it is present in other modern Arabic dialects in Saudi Arabia as Najdi Arabic.

asymmetry in modern Arabic dialects (Mohammad, 1990 and Sahawneh, 2017, for example). For others, the agreement asymmetry in Standard Arabic is the cornerstone of the arguments against the subjecthood of preverbal nominals (Eid 1975; Hassan 1975; Al-Makhzomi 1986, Alazzawi 1990, Al-Samurra'i 2001, Soltan, 2006, 2007, Al-Kawari 2008, Al-Horais 2009, Al-Balushi 2011, 2012, Fakihi 2016, among others). According to this approach, preverbal nominals are topics, and the subjects are null pronouns which evoke full agreement on the verb. SVO sentences have full agreement that is similar to sentences with null subjects.²²

In this dissertation, I do not attempt to accommodate facts in Standard Arabic and modern Arabic dialects, nor do I seek to provide a unified account of agreement but focus only on developing an analysis of subject positions in Makkan Arabic. Despite the similarities between Standard Arabic and modern Arabic dialects, I believe the structural differences between them should be studied separately. In section 3.3.2 below, I present the analysis that I adopt for VSO sentences in Makkan Arabic.

3.3.2 VSO sentences and verb movement

I follow the majority of Arab generative linguists in assuming that the derivation of VSO sentences results from verb movement from the lexical domain, *v*, to the inflectional domain, *T*, while subjects stay in situ (Al-Azzawi 1990, Mohammad 1990, Benmamoun 1992, Fassi Fehri 1993, Ouhalla 1994, Musbahien 2008, Al-Balushi 2011, 2012, Qahtani 2016, Sahawneh 2017, among others). The derivation of the VSO sentence in (17) is like the one given in (4b) above except that the subject is overt, which makes no difference under my assumptions.

- (17) aṣṭrat al-bent al-foṣṭan
 buy.perf.3.sg.f the-girl.sg.f the-dress.sg.m
 'The girl bought the dress (Lit: bough the girl the dress)

²² Note that some linguists argue that there is no correlation between partial/full agreement and subject positions in Standard Arabic (Hanaadi, 2004; Alshamsan, 2005; Al-Khaz'ali, 2008; Al-Qahtani 2016).

Many Arab linguists argue against verb movement in Arabic present tense sentences (Fassi Fehri 1993, 2004, Ouhalla 1994, Benmamoun 2000, Soltan 2007, Aoun et al. 2010). According to this perspective, verbs raise from v to T only in past-tense sentences to check the EPP feature which explains the preference of past-tense sentences to be verb-initial. In present tense sentences, verbs do not move to T. Instead, subjects move from [Spec, vP] to [Spec, TP] to check the EPP feature which explains the tendency of present tense sentences to be noun-initial. These observations are supported by the lack of copula verbs in present tense sentences in comparison to their non-present counterparts as I discuss in Chapter 5.

However, this assumption that verb movement to T takes place only in past-tense sentences implies that VSO order is only allowed in past tense sentences, and that SVO order is only allowed in present tense sentences. These claims are problematic because both SVO and VSO order are allowed in present tense and past tense sentences as shown in (18) and (19).

(18) a. raḥ-at al-bent al-ḥafl-a
 went-3.sg.f the-girl.sg the-party-sg.f
 ‘The girl attended the party.’

 b. al-bent raḥ-at al-ḥafl-a
 the-girl.sg went-3.sg.f the-party-sg.f
 ‘The girl attended the party.’

(19) a. te-rooḥ al-bent al-ḥafl-a
 3.f-go.sg the-girl.sg the-party-sg.f
 ‘The girl is attending the party.’

 b. al-bent te-rooḥ al-ḥafl-a
 the-girl.sg 3.f-go.sg the-party-sg.f
 ‘The girl is attending the party.’

To resolve this problem, I assume that verbs in Arabic always move from v to T across all types of clauses since both word orders SVO and VSO are possible in both tenses.²³

²³ I exclude here constructions that involve auxiliary verbs as well as non-finite constructions that involve a subjunctive mood marker. In these cases, the main verb does not move, but an analysis of their structure has no bearing on the main proposals of this dissertation.

Additionally, the assumption that verbs always undergo movement from v to T has the advantage that two different EPP features are not required. Another approach towards verb movement in Arabic is suggested by Aoun et al. (1994) and Aoun et al. (2010) who argue for two verb movements in Arabic VSO sentences. More specifically, they argue that subjects do not stay in situ in VSO sentences but move from [Spec, vP] to [Spec, TP] to check the EPP feature and get nominative Case. Verbs undergo movement from v to T, then undergo a second movement to a position above TP and below CP, to achieve the VSO order. However, from a Minimalist perspective, this analysis is not economical. Subject movement is not required because subjects can have their nominative Case valued in situ through Agree. By assuming that the EPP feature is checked by verb movement to T, subject movement to [Spec, TP] and verb movement beyond TP are both unnecessary.

Having presented the analysis that I adopt for postverbal subjects in Makkan Arabic which occupy the [Spec, vP] position, I turn now to discuss the status of [Spec, TP] position in Makkan Arabic and languages like Arabic, and I also discuss the [Spec, AspP] position in the derivation.

3.4 [Spec, TP]: Does it host preverbal subjects in Makkan Arabic?

English is one of the languages that requires an obligatory subject to be merged (internally or externally) into the preverbal A-position [Spec, TP] to satisfy the EPP feature on T. However, the situation in languages like Arabic is different. Arabic, for example, allows overt subjects to appear preverbally or postverbally and also allows them to be covert. This optionality leads many scholars to assume that preverbal nominals in languages like Arabic differ syntactically from those in languages like English. The proposal that [Spec, TP] position does not host preverbal nominals in languages like Arabic has precedents in the Arabic and cross-linguistic literature.

As indicated earlier, many studies argue that preverbal nominals in languages like Arabic occupy an A-bar position that also hosts left-dislocated elements (Al-Azzawi, 1990, Barbosa, 1995, Alexiadou and Anagnostopoulou, 1998; Ordóñez and Treviño, 1999; Soltan, 2007; Al-Horais, 2009; Al-Balushi 2011, 2012; Fakih, 2016; Jarrah, 2020, among others). While many of

these studies argue that [Spec, TP] is an A-bar position in languages like Arabic (Barbosa, 1995; Alexiadou and Anagnostopoulou, 1998; Soltan, 2007; Al-Horais, 2009; Al-Balushi 2011, 2012), some argue for a higher position for such nominals above TP. For example, Jlassi (2013) for Tunisian Arabic and Musbahien (2008), Fakih (2016) and Jarrah (2020) for Standard Arabic, argue that preverbal nominals occupy [Spec, TopP] above TP. Abdulrahman (2015) explicitly argues that [Spec, TP] is absent in Standard Arabic and Yemeni Arabic, and that EPP is satisfied by merging a preverbal nominal in [Spec, TopP]. Abdulrahman, following Ouali (2008), also argues that not all features are inherited by T from C, and that C may keep the EPP feature to be satisfied by merging a preverbal nominal in [Spec, CP].

The significance of such studies is that preverbal nominals, regardless of their status as arguments or non-arguments, do not occupy [Spec, TP]. I propose, following Cardinaletti (1997, 2004), that preverbal nominals occupy a higher subject position, above TP, in [Spec, SubjP].²⁴ I argue that [Spec, TP] position in Makkan Arabic can only be occupied by a copy of the phi-features of the subjects when they move to a preverbal position. I consider these resumptive pronominal forms to be a significant diagnostic that indicates the presence of a higher subject position above TP. My observations regarding the appearance of such resumptive pronouns are not commonly addressed in the literature on Arabic syntax. More specifically, the distribution of resumptive pronouns in Arabic, and in Hebrew, are mainly explored in the context of copular sentences (Doron 1986, Eid 1991, Ouhalla 2013, Choueiri 2016, Alharbi 2017), and are thus confused with copula pronouns. Doron (1986) calls such copula pronouns in (20) *Prons* and argues that such Prons can appear in Hebrew copular sentences as a spell-out of verbal agreement. I provide more details on the occurrence of such pronominals in copular sentences in Chapter 5.

- (20) dani hu ha-more
 Dani he the-teacher
 ‘Danis is the teacher.’

[Doron, 1986: 313]

²⁴ For details on Cardinaletti’s (1997, 2004) proposal and the properties of the SubjP projection, see Chapter 2.

In this section, I first show the distribution of such resumptive pronominal forms (in non-copular sentences, leaving resumption in copular sentences to be discussed in Chapter 5). I also discuss the conditions that control the appearance of resumptive pronouns.

3.4.1 Optional spell-out of pronominal copies

In Makkan Arabic, optional resumptive pronominal forms that match preverbal subjects can appear either after the subject, or after the subject and the verb. With the insertion of aspect words such as *ged* ‘already’ or the inflected *ged* ‘already’ that occupies the head Asp, resumptive pronominals can appear in more positions, before and after the aspect word.²⁵ The insertion of the aspect word *ged* ‘already’ is a diagnostic test that shows the three positions in which resumptive subject pronouns can appear; before the verb and *ged*, between the verb and *ged*, and after the verb and *ged*. Note that in the following examples, the nominal categories of preverbal subjects include proper nouns and definite nominals *nada/al-bent* ‘the girl’, nominals quantified with *kol* ‘all’/*moŕzam* ‘most’/*kaza* ‘many’ and nominals modified with adjectives and numerals. In the first set of examples, an overt subject pronoun appears after the preverbal subject but before the verb and the aspect word. I analyze the resumptive pronouns in (21) as occupying the specifier position of TP.

- (21) a. **nada/al-bent** **hya** akal-at geed-ha al-tofaḥ-a
 Nada/the-girl.sg.f 3.sg.f eat.perf-sg-f already.3.sg.f the-apple.sg.f
 ‘Nada/the girl, she already ate the apple.’
- b. **kol/moŕzam** **al-banat** **humma** akal-u geed-ahum tofaḥ
 all /most the-girl-pl.f 3.pl.m eat.perf-pl.m already-3.pl apple.pl.m
 ‘All/most the girls, they already ate apples.’

²⁵ I consider the inflection on aspect word *ged* ‘already’ as a copy of the phi-features that cliticized onto the aspect word which is a proof that the subject has moved through the AspP projection.

- c. **kaza bent** **hya/humma** akal-at/u geed-ha/ahum al-tofaḥ-a
 few girl.sg.f 3.sg.f/3.pl.m eat.perf-sg.f/pl already-3.sg.f/3.pl the-apple.sg.f
 ‘Few girls, they already ate the apple.’
- d. **kol bent** **hya** akal-at geed-ha tofaḥ-a
 every girl.sg.f 3.sg.f eat.perf-sg-f already-3.sg.f apple.sg.f
 ‘Every girl, she ate an apple.’
- e. **bent** Ṣaḡeera/waḥda **hya** akal-at geed-ha al-tofaḥ-a²⁶
 girl.sg.f little /one 3.sg.f eat.perf-sg-f already-3.sg.f the-apple.sg.f
 ‘A little/one girl, she already ate the apple.’
- f. **talata banat** **humma** akal-u geed-ahum al-tofaḥ-a
 three girl-pl.f 3.pl.m eat.perf-pl.m already-3.pl the-apple.sg.f
 ‘Three girls, they already ate the apple.’

In the second set of examples, an overt subject pronoun appears after the preverbal subject and the verb but before the aspect word. I analyze the resumptive pronouns in (22) as occupying the specifier position of AspP.

- (22) a. **nada/al-bent** akal-at **hya** geed-ha al-tofaḥ-a
 Nada/the-girl.sg.f eat.perf-sg-f 3.sg.f already-3.sg.f the-apple.sg.f
 ‘Nada/the girl, she already ate the apple.’
- b. **kol/moṣṣam al-banat** akal-u **humma** geed-ahum tofaḥ
 all /most the-girl-pl.f eat.perf-pl.m 3.pl.m already-3.pl apple.pl.m
 ‘All/most the girls, they already ate apples.’
- c. **kaza bent** akal-at/u **hya/humma** geed-ha/ahum al-tofaḥ-a
 few girl.sg.f eat.perf-sg.f/pl 3.sg.f/3.pl.m already-3.sg.f/3.pl the-apple.sg.f
 ‘Few girls, they already ate the apple.’
- d. **kol bent** akal-at **hya** geed-ha tofaḥ-a
 every girl.sg.f eat.perf-sg-f 3.sg.f already-3.sg.f apple.sg.f
 ‘Every girl, she ate an apple.’

²⁶ I show in Chapter 4 that indefinite nominals cannot occupy preverbal subject position, but when they are modified as is the case with example (21e), indefinite nominals are accepted preverbally.

- e. **bent** Şageera/wahda akal-at **hya** geed-ha al-tofaḥ-a
 girl.sg.f little /one eat.perf-sg-f 3.sg.f already-3.sg.f the-apple.sg.f
 ‘A little/one girl, she already ate the apple.’
- f. **talata banat** akal-u **humma** geed-ahum al-tofaḥ-a
 three girl-pl.f eat.perf-pl.m 3.pl.m already-3.pl the-ppl.sg.f
 ‘Three girls, they already ate the apple.’

In the third set of examples, an overt subject pronoun appears after the preverbal subject, the verb and the aspect word. I analyze the resumptive pronouns in (23) as occupying the specifier position of vP.

- (23) a. **nada/al-bent** akal-at geed-ha **hya** al-tofaḥ-a
 Nada/the-girl.sg.f eat.perf-sg-f already-3.sg.f 3.sg.f the-apple.sg.f
 ‘Nada/the girl, she already ate the apple.’
- b. **kol/mofzam al-banat** akal-u geed-ahum **humma** tofaḥ
 all /most the-girl-pl.f eat.perf-pl.m already-3.pl 3.pl.m apple.pl.m
 ‘All/most the girls, they already ate apples.’
- c. **kaza bent** akal-at/u geed-ha/ahum **hya/humma** al-tofaḥ-a
 few girl.sg.f eat.perf-sg.f/pl already-3.sg.f/3.pl 3.sg.f/3.pl.m the-apple.sg.f
 ‘Few girls, they already ate the apple.’
- d. **kol bent** akal-at geed-ha **hya** tofaḥ-a
 every girl.sg.f eat.perf-sg-f already-3.sg.f 3.sg.f apple.sg.f
 ‘Every girl, she ate an apple.’
- e. **bent** Şageera/wahda akal-at geed-ha **hya** al-tofaḥ-a
 girl.sg.f little /one eat.perf-sg-f already-3.sg.f 3.sg.f the-apple.sg.f
 ‘A little/one girl, she already ate the apple.’
- f. **talata banat** akal-u geed-ahum **humma** al-tofaḥ-a
 three girl-pl.f eat.perf-pl.m already-3.pl 3.pl.m the-ppl.sg.f
 ‘Three girls, they already ate the apple.’

In all the three positions after preverbal subjects, an overt resumptive pronoun can appear that matches preverbal subjects in number and gender, as shown in (21)-(23). These resumptive

pronouns are ungrammatical in various cases. First, resumptive pronouns cannot appear in an initial position when subjects are postverbal as shown in the (24) examples.

- (24) a. ***hya** **nada/al-bent** akal-at geed-ha al-tofaḥ-a
 3.sg.f Nada/the-girl.sg.f eat.perf-sg-f already.3.sg.f the-apple.sg.f
- b. ***humma** **kol/mofzam** **al-banat** akal-u geed-ahum tofaḥ
 3.pl.m all /most the-girl-pl.f eat.perf-pl.m already-3.pl apple.pl.m
- c. ***hya/humma** **kaza bent** akal-at/u geed-ha/ahum al-tofaḥ-a
 3.sg.f/3.pl.m few girl.sg.f eat.perf-sg.f/pl already-3.sg.f/3.pl the-apple.sg.f
- d. ***hya** **kol** **bent** akal-at geed-ha tofaḥ-a
 3.sg.f every girl.sg.f eat.perf-sg-f already-3.sg.f apple.sg.f
- e. ***hya** **bent** Şageera/wahda akal-at geed-ha al-tofaḥ-a
 3.sg.f girl.sg.f little /one eat.perf-sg-f already-3.sg.f the-apple.sg.f
- f. ***humma** **talata** **banat** akal-u geed-ahum al-tofaḥ-a
 3.pl.m three girl-pl.f eat.perf-pl.m already-3.pl the-apple.sg.f

In addition, these subject resumptive pronouns cannot appear after other pronouns as shown in (25). The reason is because resumptive pronouns and the subject pronouns are too similar which violates the non-distinctiveness principle of Nunes (1995). This principle dictates that elements must be phonologically distinct from each other for them to spell out (See Chapter 2 for more details).

- (25) a. ***hya** hya akal-at al-tofaḥ-a
 3.sg.f 3.sg.f eat.perf-sg-f the-apple.sg.f
 ‘She, she ate the apple.’
- b. ***hya** akal-at **hya** al-tofaḥ-a
 3.sg.f eat.perf-sg-f 3.sg.f the-apple.sg.f
 ‘She, she ate the apple.’

Subject resumptive pronouns also cannot appear after non-referential expressions such as negative nominals in and negative bare quantifiers in (26).

- (26) a. ***wala-bent** hya (ma) akal-at al-tofaḥ-a
 no-girl.sg.f 3.sg.f not eat.perf-sg-f the-apple.sg.f
 ‘No girl, she ate the apple.’
- b. ***mahad** hya akal al-tofaḥ-a
 nobody 3.sg.f eat.perf-sg-m the-apple.sg.f
 ‘Nobody, she ate the apple.’

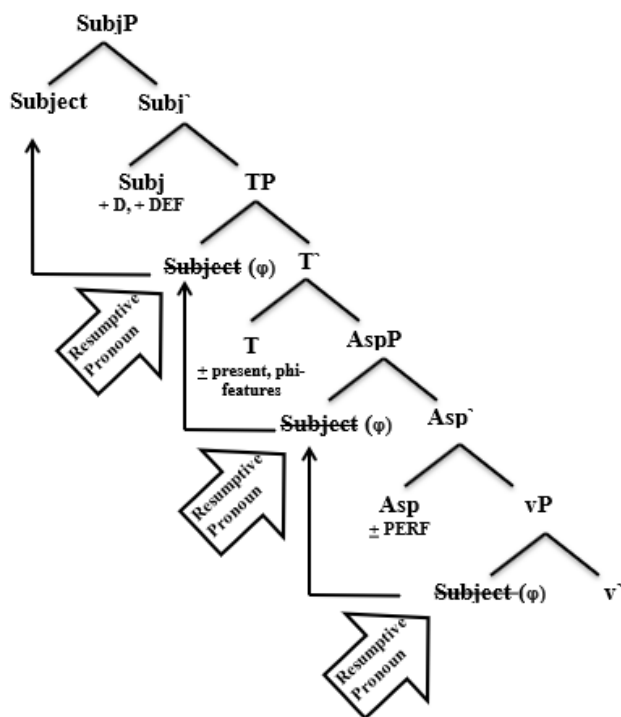
Finally, only one resumptive pronoun can appear after preverbal nominals whereas two or more resumptive pronouns in the same clause are ungrammatical (27). The spell out of more than one resumptive pronoun is ruled out by the Chain Reduction principles which deletes all but one copy.²⁷

- (27) a. ***al-bent** **hya** akal-at **hya** geed-ha al-tofaḥ-a
 the-girl.sg.f 3.sg.f eat.perf-sg-f 3.sg.f already.3.sg.f the-apple.sg.f
 ‘The girl, she already ate the apple.’
- b. ***al-bent** **hya** akal-at geed-ha **hya** al-tofaḥ-a
 the-girl.sg.f 3.sg.f eat.perf-sg-f already.3.sg.f 3.sg.f the-apple.sg.f
 ‘The girl, she already ate the apple.’
- c. ***al-bent** akal-at **hya** geed-ha **hya** al-tofaḥ-a
 the-girl.sg.f eat.perf-sg-f 3.sg.f already.3.sg.f 3.sg.f the-apple.sg.f
 ‘The girl, she already ate the apple.’
- d. ***al-bent** **hya** akal-at **hya** geed-ha **hya** al-tofaḥ-a
 the-girl.sg.f 3.sg.f eat.perf-sg-f 3.sg.f already.3.sg.f 3.sg.f the-apple.sg.f
 ‘The girl, she already ate the apple.’

²⁷ In a movement chain, the Chain Reduction principles of Nunes (1995) rules out all the copies except the head of the chain which is the moved nominal. However, Nunes states that a spell out of a second copy is possible, and in spelling out lower copies such as resumptive pronouns are not problematic because they are distinct from the head of the chain (See Chapter 2 for more details). Pronouncing two non-distinct resumptive copies as in example (27) above is ruled out by Chain Reduction.

In this dissertation, I argue that preverbal subjects in Makkan Arabic do not occupy [Spec, TP] position, which is the preverbal subject position in languages like English. I adopt Cardinaletti's (1997, 2004) framework in Italian (and null-subject languages) that preverbal subjects do not occupy [Spec, TP] but are hosted by the higher subject position in [Spec, SubjP] as I will explain in Chapter 4. However, I depart from Cardinaletti's proposal in which she shows a specialization for [Spec, TP] to be occupied by weak and null pronouns (Cardinaletti 1997, 2004). I argue that [Spec, TP] in Arabic only hosts a copy of the phi-features that results from subject movement to a preverbal position. While I leave laying out the proposal of the position and derivation of preverbal subjects in Makkan Arabic to be fully discussed in Chapter 4, a brief description of the proposed position and derivation of preverbal subjects is needed in this section to specify the positions in which resumptive pronouns can appear. I propose that subjects in SVO sentences occupy the specifier position of Subject or Predication projection (above TP), and that the SVO order is derived by a successive movement of postverbal subjects from their base position in [Spec, vP], passing through [Spec, AspP] and [Spec, TP] then to [Spec, SubjP], forming a movement chain. These positions each have a copy of the phi-features of the subject, as shown in (28).

(28)



Following Chomsky's (1995) Copy Theory of Movement as employed by Musbahien (2008) on Jordanian Arabic, I assume that when nominals move, they leave a copy of their phi-features in their merged position and the positions they move through.²⁸ In this case, a copy of the phi-features of the moved subject nominal is left behind in the specifier positions of the projections (vP, AspP and TP). I call these copies resumptive pronouns to distinguish them from other pronominal forms (I cover two more types of pronouns in this dissertation: question marker pronouns in section 3.4.2 of this chapter and copula pronouns in Chapter 5).

According to the *Late Insertion* principle in the Distributed Morphology framework, these phi-features in the terminal nodes are not supplied with phonological content until the end of the derivation. The spell-out of these resumptive pronominal copies is limited to only one spell out (in addition to spelling out the moved nominal) as in (29). When subjects are overt pronouns (which is the phonological realization of phi-features) as in (25) above, the spell-out of the resumptive pronominals is disallowed because the pronominal subject and the resumptive copies are non-distinct which violates the non-distinctiveness principle.

- (29) a. **al-bent (hya)** akal-at **(hya)** al-tofaḥ-a
 the-girl.sg.f 3.sg.f eat.perf-sg-f 3.sg.f the-apple.sg.f
 'The girl, she ate the apple.'
- b. ***hya** hya akal-at al-tofaḥ-a
 3.sg.f 3.sg.f eat.perf-sg-f the-apple.sg.f
 'She, she ate the apple.'

When subjects do not undergo any movement and stay in their postverbal position in VSO order, as shown in (30), it is expected that no pronominal copy can appear in any other subject position. An overt resumptive pronominal that precedes a postverbal subject yields an ungrammatical sentence.

- (30) ***hya** akal-at **al-bent** al-tofaḥ-a
 3.sg.f eat.perf-sg-f the-girl.sg.f the-apple.sg.f

²⁸ I follow Grohmann (2003) who considers resumptive pronouns and partial copies to be lower copies of movement.

Barbosa (1995) observes the occurrence of such resumptive pronominal elements in Romance languages, which she refers to as emphatic pronouns. Examples of emphatic pronouns are provided in her work from Portuguese (31). Barbosa explains that emphatic pronouns can be found in other Romance languages as well.

- (31) A **Teresa** escreveu **ela** o poema, ninguém a ajudou
the **Teresa** write.perf **she** the poem, nobody her helped
‘Teresa wrote the poem herself, nobody helped her.’

Barbosa points out that in example (31) if *Teresa* is a real subject, it cannot be co-referential with the pronoun *ela* because this violates principle B of the binding theory which states that the antecedent must be outside the local domain of the clause. Even by considering *ela* to be a non-argument anaphor rather than a pronominal, the counterpart construction is not acceptable in languages like English as in **John bought HE the car*. On this basis, Barbosa argues that preverbal nominals never occupy an A-position in Romance null-subject languages, and that the real subject always occupies a postverbal position. According to this analysis, preverbal nominals are instances of base-generated clitic-left dislocations or involve focus-movement of the subject.

Although I agree with Barbosa that these pronouns are emphatic, I argue that their presence cannot be used as evidence that preverbal subjects are not real subjects. First, the comparison between Portuguese and English is not informative because sentences such as **bought HE the car* or **bought JOHN the car* are not acceptable in English because subjects in English do not appear postverbally. Additionally, Arabic (as well as Romance languages) is a null subject language in the sense that pronominal subjects (32) are usually null but can be optionally spelled out for emphasis.

- (32) (**hya**) akal-at al-tofaḥ-a
3.sg.f eat.perf-sg-f the-apple.sg.f
‘(She) ate the apple.’

As for the resumptive pronouns, or emphatic pronouns as referred to by Barbosa, I do not assume that these pronouns are associated with their antecedents via binding as Barbosa suggests but via movement. Recall that there are two types of resumptive pronouns: True Resumptives are

related to their antecedents by binding, and Apparent Resumptives are related to their antecedents by movement (Aoun, Choueiri and Hornstein 2001; McCloskey 1990, 2005; Haddad 2010). In this dissertation I analyze resumptives as resulting from the movement of nominals to [Spec, SubjP]. I propose that these resumptive pronouns result from copying the phi-features of the moved subjects. By contrast, bound resumptive pronouns are syntactic variables that are bound by a nominal antecedent outside their local domains. Such resumptives have an A-bar relation with their antecedents. In this dissertation, I analyze resumptive pronouns as unbounded elements that relate to their antecedents via movement as discussed earlier.

One last point is regarding the pragmatic use of such optional resumptive pronouns in Makkan Arabic (and other Arabic dialects as well). The optional spell-out of resumptive copies is motivated by the speaker's desire to place emphasis on the subject's role in the event conveyed by the sentence. In (33b), the speaker does not only convey the event that *the girl forgot to turn off the machine*, but also emphasizes her role in the represented event.

- (33) a. al-bent nesy-at tetfi al-jihaz
 the-girl.sg.f forget.perf-3.sg.f 3.f-turn off.imperf.sg the-machine.sg.m
 'The girl forgot to turn off the machine.'
- b. al-bent **hya** nesy-at tetfi al-jihaz
 the-girl.sg.f **3.sg.f** forget.perf-3.sg.f 3.f-turn off.imperf.sg the-machine.sg.m
 'The girl, she forgot to turn off the machine.'

Having discussed resumptive pronouns in this section, I distinguish these pronominals from another type of pronominals, which are question-marker pronouns.

3.4.2 Subject pronouns as question-markers

In this chapter, I address resumptive pronouns which result from copying phi-features of the moved nominals. In addition to this type of pronominal, I cover two more types that are often confused with resumptive pronominals: question marker pronouns (addressed in this section), and copula pronouns or Prons (in Chapter 5). One study that distinguishes these two types of pronominals is presented by Jlassi (2013) who explores the occurrence of two pronominal forms

in Tunisian Arabic; Resumptive pronouns and question-marker pronouns. Jlassi refers to them as H-forms and suggests that nominals along with their pronominal copies, form a NP-H pair, and together they represent a case of subject doubling, or Multiple Subject Construction²⁹. Jlassi argues that the subject NP-H pair can be realized in various syntactic constructions, with the NP before the H-form (34a), which I refer to as resumptive pronouns, or after the H-form (34b), which I refer to as question-marker pronouns. Jlassi explains that each of these NP-H pairs is correlated with a distinct information structure.

- (34) a. **le-wled** **huwwa** mʃa: l- el-masrah, muʃ e-ttʊfla
 the-boy he go-PRF.3SM to-the-theatre not the-girl
 ‘The boy went to the theatre, not the girl.’
- b. **huwwa** **le-wled** mʃaa l- el-masrah, ma: fi: baal-i-ʃ
 he the-boy go-PRF.3SM to-the-theatre not in knowledge-my-not
 ‘I had no idea whether the boy went to the theatre.’

[Jlassi, 2013:1]

Jlassi proposes that the two preverbal topicalized subjects, represented by the NP-H pair, occupy a topic position [Spec, TopP] and a lower focus position [Spec, FinP]. Sentence (34a) represents the construction that I refer to as resumptive pronouns in which the phi-features of the subject *the boy* is copied and spelled out in a position after the subject. In (34b), a semi-fixed third-person pronoun appears before the subject, usually to mark questions, or in this case, an exclamatory statement that has the force of an interrogative sentence. I address this type of pronominal in this section.

Third-person subject pronouns can be used in some modern Arabic dialects before questions to mark the interrogative functions of the sentence. I will call these pronouns question-pronouns. These question pronominal forms must be distinguished from those that result from subject movement. Question-pronouns are non-referential, and they can be followed by either nominals (35a) or first-person and second-person pronouns (35b).

²⁹ Jlassi (2013) does not explain why the term H-form is chosen, but presumably it is because all third person pronominal forms (hya ‘she’, hwa ‘he’ and humma ‘they’) begin with the H sound.

- (35) a. (hwwa) al-wald da meen?
 3.sg.m the-boy.sg.m this who
 ‘Who is this boy?’
- b. (hwwa) enta/enti meen?
 3.sg.m 2.sg.m/f who
 ‘Who are you?’

When such optional question-pronouns precede questions, these pronouns usually match the subjects in gender, as in (36) and (37), and can also match in number (38).

- (36) a. (huwa) al-wald **feen?**
 3.sg.m the-boy.sg.m where
 ‘Where is the boy?’
- b. (huwa) **feen** al-wald?
 3.sg.m where the-boy.sg.m
 ‘Where is the boy?’
- (37) a. (hya) al-bent **leef** te-sawi mafakel kateer?
 3.sg.f the-girl.sg.f why 3.f-make.imperf.sg problem.pl.f much
 ‘Why does the girl make a lot of problems?’
- b. (hya) **leef** al-bent te-sawi mafakel kateer?
 3.sg.f why the-girl.sg.f 3.f-make.imperf.sg problem.pl.f much
 ‘Why does the girl a lot of problems?’
- (38) a. (hya/humma) al-nas **feen?**
 3.sg.f/3.pl.m the-people.pl.f where
 ‘Where are the people?’
- b. (hya/humma) **feen** al-nas?
 3.sg.f/3.pl.m where the-people.pl.f
 ‘Where are the people?’

However, when these pronouns are followed by first-person (39a) and second-person subject pronouns (39b), they are always singular masculine pronouns. The order of the interrogative sentences after question pronouns is flexible in the sense that nominals can either precede or follow the question word.

- (39)a. hwa enta/enti/ento/ana/eHna **feen?**
 3.sg.m 2.sg.m/2.sg.f/2.pl where
 ‘Where are you/are we/am I?’
- b. hwa **feen** enta/enti/ento/ana/eHna?
 3.sg.m where 2.sg.m/2.sg.f/2.pl/1.sg/1.p?
 ‘Where are you/are we/am I?’

The use of question-pronouns at the beginning of a question is more common in other Arabic dialects such as Egyptian Arabic and Jordanian Arabic. Al-Daher (2016) notes that they are always in the singular masculine form in Jordanian Arabic. He analyzes these question pronouns as question-particles that are homophonous with the third-person masculine singular pronoun *howweh*.³⁰

- (40)a. (howweh) **iz-zalameh** ʃaf min ʔimbariḥ?
 Q the-man saw.3MS **who** yesterday
 ‘Who did the man see yesterday?’
- b. (howweh) ʔayya **binit** iz-zalameh ʃaf-hai ʔimbariḥ?
 Q which **girl** the-man saw.3MS-**her** yesterday
 ‘Which girl (x) is it such that the man saw (x) yesterday?’

[Al-Daher, 2016: 31-32]

Al-Daher proposes that wh-questions in Jordanian Arabic are not derived by wh-movement. The wh-phrases either stay in-situ or are moved to an initial position by processes other than wh-movement such as left-dislocations or focus movement. He argues that question formation in Jordanian Arabic makes use of a null interrogative operator (suggested by Pesetsky 1987) that unselectively binds the wh-phrases in their first-merge position. This operator is base-generated in C and bears the same index as the wh-phrase. Al-Daher considers the question-particle *howweh* to be a lexical realization of this interrogative operator which is similar to the

³⁰ I speculate that the use of the question particle in Arabic dialects is undergoing grammaticalization towards losing all matching features with the subject in the question. In Makkan Arabic, the question particle matches the nominal subject, but not the subject pronouns, in gender and sometimes in number. In Egyptian Arabic, they sometimes match but in gender only. In Jordanian Arabic, the question particle is always in the masculine singular form as reported in Al-Daher (2016).

English *whether* and *if* as lexical realizations of the Q-morpheme under Baker's (1970) analysis. I follow Al-Daher in assuming that the counterparts to this question particle in Makkan Arabic, shown in (34 – 39), are the spell-out of an interrogative operator in C that unselectively binds the wh-phrases in their first-merge position. I leave further exploration of these question pronouns for future research.

3.5 Summary and Conclusion

In this chapter, I first explored the structure of null subjects and postverbal subjects in Makkan Arabic. I argued that in both structures, subjects stay in situ in [Spec, vP] without the need to move to any higher preverbal subject positions. Based on the Agree-approach that I adopt and on my assumption that verbs undergo movement to T, which satisfies the EPP feature, null subjects and overt subjects in VSO order are not required to move from their base position. I also argued that [Spec, TP] does not host preverbal subjects in Makkan Arabic by relying on the appearance of pronominal forms in [Spec, TP], [Spec, AspP] and [Spec, vP] after preverbal nominal subjects. I proposed to employ the non-distinctiveness requirement (which states that copies in a movement chain can be spelled out if they are distinct from each other) on spell-outs. According to this principle, resumptive pronouns can be realized because they do not violate the non-distinctiveness principle. I considered these pronominal forms as pronominal copies of the successively moved subject from [Spec, vP], through [Spec, AspP] and [Spec, TP], before reaching their higher preverbal argument position in [Spec, SubjP]. In Chapter 4, I discuss this higher preverbal subject position in the SubjP projection, and I distinguish it from left-dislocated nominals in the CP domain.

Chapter 4

Preverbal Subjects and Topics

4.1 Introduction

In this chapter, I distinguish between Subject of Predication Phrases (SubjP) and Topicalization Phrases (TopP) and tease apart two preverbal positions where nominals can be hosted, namely [Spec, SubjP] and [Spec, TopP]. These positions belong to different domains and attract different categories. I suggest that [Spec, SubjP] is an argument position (above TP) that hosts structural subjects while [Spec, TopP] is a non-argument position (above SubjP) in the CP domain which hosts left-dislocated/topicalized phrases. This suggestion goes against the common assumption that all preverbal subjects in null-subject languages are instances of left-dislocation.

The division of the two preverbal positions, [Spec, SubjP] and [Spec, TopP] is based on Rizzi's cartographic approach. In a similar vein to Rizzi (1997) who splits the CP domain into various projections, including the TopP projection, Cardinaletti (1997, 2004) splits the subject-domain into lower and higher subject positions, including the SubjP projection. By adopting a cartographic approach, I propose that preverbal subjects occupy the subject position in [Spec, SubjP] while topicalized/left-dislocated nominals occupy [Spec, TopP]. Based on the positions that nominal categories occupy when co-occurring with *wh*-phrases, I argue that certain nominal categories such as bare negative quantifiers and modified bare nominals can only be subjects in [Spec, SubjP] and cannot get left-dislocated into a higher position in the CP domain. I also tackle the issue of definiteness in relation to preverbal subjects since indefinite nominals are not allowed in preverbal positions, and I examine the effect of modification in expanding the distribution of indefinites preverbally. I discuss the existential constructions which involve preverbal indefinite nominals. On the surface, such constructions seem to provide counter evidence to the idea that preverbal subjects cannot be indefinite since existential particles commonly precede preverbal indefinite nominals. Before I lay out the analysis that I propose for preverbal nominals, I describe the categories that can appear preverbally in Makkan Arabic.

There are various nominal categories that can occupy preverbal subject position in Makkan Arabic. The following examples show that proper nouns (1), subject pronouns (2) and definite subjects (3) can all occur before transitive and intransitive verbs in preverbal position.³¹ Definite nominals that are preceded by quantifiers such as *kol* ‘all’ (4) and *moʕzam* ‘most’ (5) are also allowed in preverbal position.

- | | |
|---|---|
| (1) a. nada nam-at
Nada sleep.perf-sg-f
‘Nada slept.’ | b. nada akal-at al-tofaḥ-a
Nada eat.perf-sg-f the-apple.sg.f
‘Nada ate the apple.’ |
| (2) a. hya nam-at
3.sg.f sleep.perf-sg-f
‘She slept.’ | b. hya akal-at al-tofaḥ-a
3.sg.f eat.perf-sg-f the-apple.sg.f
‘She ate the apple.’ |
| (3) a. al-bent nam-at
the-girl.sg.f sleep.perf-sg-f
‘The girl slept.’ | b. al-bent akal-at al-tofaḥ-a
the-girl.sg.f eat.perf-sg-f the-apple.sg.f
‘The girl ate the apple.’ |
| (4) a. kol al-banat nam-u
all the-girl.pl.f sleep.perf-pl.m
‘All the girls slept.’ | b. kol al-banat akal-u al-tofaḥ-a
all the-girl-pl.f eat.perf-pl.m the-pple.sg.f
‘All the girls ate the apple.’ |
| (5) a. moʕzam al-banat nam-u
most the-girl.pl.f sleep.perf-pl.m
‘Most of the girls slept.’ | b. moʕzam al-banat akal-u al-tofaḥ-a
most the-girl-pl.f eat.perf-pl.m the-pple.sg.f
‘Most of the girls ate the apple.’ |

In contrast to definite nominals, not all indefinite nominals can appear in preverbal position. More specifically, although bare unmodified indefinite nominals, in singular or plural forms, are allowed in postverbal position, they are not allowed in preverbal position as illustrated in (6) and (7). However, when the bare indefinite nominals are modified by adjectives as in (8) or numerals as in (9) and (10), they are grammatical in preverbal position.

³¹ I presented similar data in Chapter 3 while discussing resumptive pronominals that appear after preverbal nominals. In this Chapter, I dedicate the discussion to the types of nominals that appear preverbally.

- (6) a. ***bent** nam-at b. ***bent** akal-at al-tofaḥ-a
 girl.sg.f sleep.perf-sg-f girl.sg.f eat.perf-sg-f the-apple.sg.f
 ‘A girl slept.’ ‘A girl ate the apple.’
- (7) a. ***banat** nam-u b. ***banat** akal-u al-tofaḥ-a
 girl.sg.f sleep.perf-pl.m girl.sg.f eat.perf-pl.m the-apple.sg.f
 ‘Girls slept.’ ‘Girls ate the apple.’
- (8) a. **bent** ṣaḡeera nam-at b. **bent** ṣaḡeera akal-at al-tofaḥ-a
 girl.sg.f little sleep.perf-sg-f girl.sg.f little eat.perf-sg-f the-apple.sg.f
 ‘A little girl slept.’ ‘A little girl ate the apple.’
- (9) a. **wahda bent** nam-at b. **wahda bent** akal-at al-tofaḥ-a
 one.sg.f girl.sg.f sleep.perf-sg-f one.sg.f girl.sg.f eat.perf-sg-f the-apple.sg.f
 ‘One girl slept.’ ‘One girl ate the apple.’
- (10) a. **talata banat** nam-u b. **talata banat** akal-u al-tofaḥ-a
 three girl.pl.f sleep.perf-pl.m three girl.pl.f eat.perf-pl.m the-apple.sg.f
 ‘Three girls slept.’ ‘Three girls ate the apple.’

In addition to indefinite nominals that are modified by adjectives and numerals, quantified indefinite nominals with *kaza* ‘few’ (11), *kol* ‘each/every’ (12) and the negative quantifier *wala* ‘not a/no’ (13) can all occur in preverbal position.³² As illustrated in (13), when *wala-bent* ‘no girl’ is preverbal, the verb can optionally be negated with the verbal negation participle *ma* ‘not’. The negative particle before the verb confirms the negative interpretation without which the sentence is still negative. However, when *wala-bent* ‘no girl’ is postverbal as shown in section 3.3.1 above, an obligatory negation particle must appear before the verb.

- (11) a. **kaza bent** nam-at/u b. **kaza bent** akal-at/u al-tofaḥ-a
 few girl.sg.f sleep.perf-sg-f/pl few girl.sg.f eat.perf-sg-f/pl the-apple.sg.f
 ‘Few girls slept.’ ‘Few girls ate the apple.’
- (12) a. **kol bent** nam-at saḡa b. **kol bent** akal-at tofaḥ-a
 every girl.sg.f sleep.perf-sg-f hour.sg every girl.sg.f eat.perf-sg-f apple.sg.f
 ‘Every girl slept for an hour’ ‘Every girl ate an apple.’

³² Aoun et al. (2010) find *kam* ‘few’ in Lebanese Arabic, which is the equivalent of *kaza* ‘few’ in MA, to be ungrammatical in preverbal position. As a native speaker of Makkan Arabic I find *kaza* ‘few’ to be grammatical preverbally but more natural postverbally.

- (13) a. **wala-bent** (ma) nam-at b. **wala-bent** (ma) akal-at al-tofaḥ-a
 no-girl.sg.f not sleep.perf-sg-f no-girl.sg.f not eat.perf-sg-f the-apple.sg.f
 ‘No girl slept (Lit: Not a girl slept) ‘No girl ate the apple.’

In the case of the bare negative quantifier *maḥad* ‘nobody’, it can only occur preverbally, and it is ungrammatical in postverbal subject position as illustrated in section 3.3.1 above.

- (14) a. **maḥad** nam b. **maḥad** akal al-tofaḥ-a
 nobody sleep.perf-sg-m nobody eat.perf-sg-m the-apple.sg.f
 ‘Nobody slept.’ ‘Nobody ate the apple.’
- (15) a. *nam **maḥad** b. *akal **maḥad** al-tofaḥ-a
 sleep.perf-sg-m nobody eat.perf-sg-m nobody the-apple.sg.f
 ‘Nobody slept.’ ‘Nobody ate the apple.’

Having described the categories of nominals that may appear preverbally, I dedicate this chapter to discussing the analysis for preverbal nominals in Makkan Arabic. This chapter is organized as follows. In section 4.2, I explore the indefiniteness effect of nominals in preverbal subject position. I consider the role of modification in facilitating the occurrence of indefinite nominals preverbally in section 4.2.1 and in section 4.2.2, I examine the existential structure involving the existential particle *feeh*. I expand the properties of the existential structure to the possessive structure expressed through prepositions in section 4.2.3. In section 4.2.4, I show the clause structure adopted for existential and possessive constructions. I provide an analysis to the position and derivation of preverbal subjects in the clause structure in section 4.3. In section 4.3.1, I argue that preverbal nominals in Makkan Arabic occupy the specifier position in SubjP, and in section 4.3.2, I suggest that such preverbal subjects are derived by successive movements from their thematic position in [Spec, vP] to [Spec, SubjP] to satisfy the SoP feature on the head Subj. In section 4.4, I distinguish preverbal subjects from left-dislocated phrases. I conclude the chapter in in section 4.5 by summarizing the main points covered in the chapter.

4.2 Indefinite nominals as preverbal subjects

In this section, I explore the issue of indefiniteness of preverbal nominals in the Arabic and Romance literature since it is generally assumed that indefinite nominals are not allowed preverbally in these languages.³³ I discuss the role of modification of indefinite nominals in allowing them to appear in preverbal subject position. Then I introduce the existential and possessive constructions which exclusively involve indefinite nominals and license them preverbally. I finally present the analysis that I suggest for the clause structure of existential and possessive constructions.

4.2.1 Indefiniteness and the role of modification

The definiteness asymmetry between preverbal and postverbal subject positions has frequently been discussed in the literature on Standard Arabic and modern Arabic dialects (Demirdache 1991; Halila 1992; Fassi Fehri 1993, 2012, Mohammad 1998; Soltan 2007; Bardeas 2009; Aoun et al. 2010; Al-Balushi 2011, 2012; Al-Qahtani 2016, among others).³⁴ Makkan Arabic demonstrates such an asymmetry between preverbal and postverbal positions with regard to bare indefinite nominals and the bare negative quantifier *maḥad*, as will be discussed below. The definiteness restriction on preverbal subjects is attested in other languages as well, such as in French (Mathieu 2012), Spanish (Suñer, 1982; Contreras, 1986, Camacho 2013) and Italian

³³ I consider Romance languages because they resemble Arabic in allowing VSO word order and allowing null subjects unlike Germanic languages, for example, which only allows SVO sentences with obligatory preverbal subjects.

³⁴ Although it is commonly discussed that indefinite nominals are ungrammatical in preverbal subject position, many Arabic speakers of Makkan Arabic whom I personally consulted, and Arab linguists such as Musbahien (2008) for Jordanian Arabic, accept bare unmodified indefinite nominals preverbally. Some Arabic dialects, such as Jordanian Arabic as discussed in Jarrah and Abusalim (2020), have definiteness restrictions on postverbal subjects in VSO instead of preverbal subjects. As a native speaker of Makkan Arabic, I find indefinite preverbal subjects grammatical in certain context, but I leave such variations to be explored in future research. For the purposes of the current dissertation, I consider examples with bare unmodified indefinite nominals preverbally to be ungrammatical, following most Arab linguists.

(Delfitto and Schroten, 1991), and is known as the subject specificity effect. However, the generalization that preverbal subjects must be definite or specific is problematic for two reasons. First, the restriction is not limited to indefinite subjects but holds of fronted bare indefinite objects as well. In the following examples from Makkan Arabic, bare indefinite objects cannot move from their base position while definite ones can.

- (16) a. ommi ʃaf-at **al-banat** fi al-ḥadeega
 mother.sg.f-1.sg see.perf-3.sg.f the-girl.pl.f in the-park.sg.f
 ‘My mother saw the girls in the park.’
- b. **al-banat** ommi ʃaf-at-hum fi al-ḥadeega
 the-girl.pl.f mother.sg.f-1.sg see.perf-3.sg.f-3.pl.m in the-park.sg.f
 ‘The girls, my mother saw them in the park.’
- (17) a. ommi ʃaf-at **banat** fi al-ḥadeega
 mother.sg.f-1.sg see.perf-3.sg.f girl.pl.f in the-park.sg.f
 ‘My mother saw girls in the park.’
- b. ***banat** ommi ʃafat-hum fi al-ḥadeega³⁵
 girl.pl.f mother.sg.f-1.sg see.perf-3.sg.f-3.pl.m in the-park.sg.f
 ‘Girls, my mother saw them in the park.’

In Spanish, Camacho (2013) shows that bare indefinite nominals are ungrammatical in preverbal position (18a), and they can only occur in postverbal position (18b).

- (18) a. *Niños no llegaron esta mañana.
 children not arrived.3.pl this morning
 ‘Children didn’t arrive this morning.’
- b. no llegaron niños esta mañana.
 not arrived children this morning
 ‘Children didn’t arrive this morning.’ (No children arrived this morning)
 [Camacho 2013: 200]

The second problem with the generalization that preverbal subjects must be definite or specific is that indefinite nominals are possible as preverbal subjects if they are modified by

³⁵ The sentence is grammatical with a contrastive focus on *banat* ‘girls’, but I do not consider focus movement in this dissertation.

adjectives, numerals, or certain quantifiers, as show in (8)-(12) above. A similar observation is made by Aoun et al. (2010) who briefly address the role of modification in allowing indefinite nominals to appear preverbally: “Those facts seem to indicate that the more specific the subject is, the more freedom it has to occur in either the preverbal or postverbal position. It is not clear what to make of these data as far as the status of the preverbal position is concerned” (Aoun, et al. 2010: 63). The important questions that must be addressed at this point, not only in Arabic but also cross-linguistically, are why indefinite nominals cannot occur preverbally and why modification can license them to do so.

One of the attempts to answer the question of why indefinite nominals are disallowed preverbally is proposed by Casielles-Suarez (1997a, 1997b) who distinguishes between two topical elements in Spanish: Sentence Topics and Backgrounds, in order to investigate the correlation between information structure and syntactic structure. Sentence Topics occupy the preverbal specifier position while Backgrounds occupy dislocated positions. Only subjects with the Topic feature, which is an optional feature of D, can raise to preverbal positions. From this viewpoint, bare nominals (NPs not DPs) that lack determiners are not grammatical in preverbal positions that only allow DPs to be subjects. As satisfactory as the NP vs. DP analysis seems, it does not explain why the presence of modifiers allows indefinite nominals to appear preverbally.

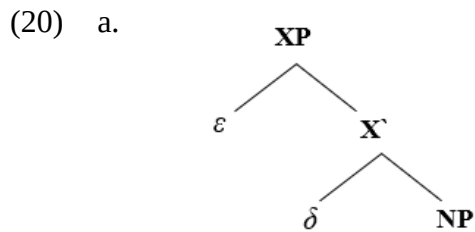
Another account for the ungrammaticality of preverbal bare nominals is suggested by Delfitto (1997, 2007) and Longobardi (2000, 2001) who explore bare nominals in Romance languages. They argue that bare nominals are not licensed in ungoverned positions, and since preverbal subject position is not sufficiently governed, bare nominals are ruled out in this position. To explain the role of modification, Longobardi confirms that preverbal bare nominals are constrained by the obligatory presence of relative, adjectival or PP modifiers. “Preverbal subject positions in several languages have been known for many years to be “insufficiently governed” in this sense. Modification, unnecessary for clearly lexically governed BNs such as direct objects, seems to somehow remedy the violation” (Longobardi, 2000:693). Unlike modified and overtly determined nominals, unmodified bare nominals in Romance languages are required to be lexically governed as is the case with postverbal subjects and objects which are

governed (c-commanded) by verbs. However, occupying preverbal positions, which are known to be insufficiently governed, is a violation that can be remedied through modification.

In addressing the question of why modification allows indefinite nominals to appear in preverbal subject position, Al-Qahtani (2016) argues that in Standard Arabic and Najdi Saudi dialects indefinite nominals, which are disallowed preverbally, can be licensed in preverbal subject position through three types of modification, adjectives (20a), diminutives (20b) and the construct state construction (20c), as shown in the examples from Najdi Arabic below. “The role of modification goes beyond its basic role of modifying, but positively contributes to the distribution of indefinite DPs” (Al-Qahtani, 2016:8).

- (19) a. waladi-n malgofi-n kesar al-finjal
 boy.sg.m-NUN naughty.sg.m-NUN break.perf.3.sg.m the-cup.sg.m
 ‘A naughty boy broke the cup.’
- b. wlaidi-n kesar al-finjal
 boy.sg.m.DIM-NUN break.perf.3.sg.m the-cup.sg.m
 ‘A small boy broke the cup.’
- c. walad mdarrisi-n kesar al-finjal
 boy.sg.m teacher.sg.m-NUN break.perf.3.sg.m the-cup.sg.m
 ‘A teacher’s son broke the cup.’
- [Al-Qahtani, 2016:5-6]

Al-Qahtani builds his argument on the Syntactic Visibility Theory by Giusti (2002), as stated in (20) below.



- b. Syntactic visibility conditions require ε and δ to be visible to the NP in order to form an intact DP that can occupy an argumental position, the preverbal subject position in our case.

[Al-Qahtani, 2016: 12]

According to the Syntactic Visibility Conditions, the head position and the specifier position of the DP must be present (or visible) for bare indefinite nominals to appear preverbally. Al-Qahtani suggests that in Arabic modified indefinite subjects, the head position of DP is filled by nunnation, which is (according to Al-Qahtani) an indefinite suffix marker that partially functions as a determiner, while the specifier position of DP is filled by a modifier. Thus, nunnation and modification can together satisfy the visibility condition in Arabic and license indefinite nominals in preverbal subject positions. Whereas I agree with Al-Qahtani that modification allows indefinite nominals to appear in preverbal subject position, I point out that only Standard Arabic and few modern Arabic dialects, such as Najdi Arabic, employ nunnation with indefinite nominals. Makkan Arabic and many other modern Arabic dialects lack the morphological indefinite marker of nunnation, as shown in (21) for Makkan Arabic and (22) for Standard Arabic.

- | | |
|--|---|
| (21) a. bent
girl.sg.f
‘a girl’ | b. banat
girl.pl.f
‘girls’ |
| (22) a. bent-an
girl.sg.f-NUN
‘a girl’ | b. banat-an
girl.pl.f-NUN
‘girls’ |

Zamparelli (1995, 2000) provides a partially similar analysis of the role of modification in Romance languages without emphasizing the obligatory presence of determiners in the head of DP. Zamparelli classifies definite nominals as strong determiners and indefinite nominals as weak determiners (determiners in his work cover the categories of articles, determiners, and quantifiers). In the case of indefinite nominals, abstract functional heads can be licensed if a modifier is inserted in their specifier position. Zamparelli employs the strong/weak distinction to account for the distribution of nominals in preverbal position and also for the distribution of the complements of existential *there*-sentences in English and Italian. More specifically, strong nominals cannot be complements of existential *there*-sentences but can occur in preverbal position whereas weak determiners cannot occur in preverbal position but can be complements of

existential *there*-sentences. I expand on the association between existential constructions and indefiniteness in section 4.2.2 and 4.2.3 below.

I follow Zamparelli (1995, 2000), Longobardi (2000) and Al-Qahtani (2016) in adopting the view that the presence of modifiers correlates with additional functional structure. I do not, however, assume that modified indefinite nominals are full DPs because they do not pattern with definite nominals for topicalization, for example. Instead, I propose that modifiers occupy the specifier of an intermediate projection, e.g. NumP (Ritter 1991, Zamparelli 2000). As NumPs, modified indefinites can occupy higher positions that bare NPs cannot.

There is one last point regarding the role of modification that I need to emphasize here. Some Arabic speakers and Arab linguists, such as Musbahien (2008), not only accept modified definite nominals (23a) as preverbal subjects but also accept bare unmodified indefinite nominals (23b) preverbally.

- (23) a. al-bessa da-xal-at al-maṭḥax
 cat.sg.f enter.perf-3.sg.f the-kitchen.sg.m
 ‘The cat entered the kitchen.’
- b. bessa da-xal-at al-maṭḥax
 cat.sg.f enter.perf-3.sg.f the-kitchen.sg.m
 ‘A cat entered the kitchen.’

In this example, *bessa* ‘a cat’ in (23) can be interpreted as a subject and the verb phrase as a predicate. However, in copular sentences that lack overt copula verbs, as in (24a), preverbal nominals cannot be interpreted as subjects and the following prepositional phrase *fi al-maṭḥax* ‘in the kitchen’ cannot be interpreted as a predicate, but only a modifier. Only when the indefinite nominal *bessa* ‘a cat’ is modified (24b), the prepositional phrase *fi al-maṭḥax* ‘in the kitchen’ is interpreted as a predicate.

- (24) a. bessa fi al-maṭḥax
 cat.sg.f in the-kitchen.sg.m
 ‘A cat in the kitchen.’

- b.

bessa	ṣaḡeer-a	fi	al-maṭḡax
cat.sg.f	little-sg.f	in	the-kitchen.sg.m

‘A little cat is in the kitchen.’

Thus, even though there is a variation among native speakers of modern Arabic dialects in allowing bare indefinite subjects preverbally, the two sentences in (24) show that bare indefinite nominals cannot be interpreted as subjects of present tense copular sentences, and that only modification allows bare indefinite nominals to be subjects of present tense copular sentences. Halila (1992) takes this argument a step further and argues that bare indefinite nominals that are followed by verb phrases do not encode a sentence reading but a reading of a noun that is followed by a relative clause. ‘The linguistic string in [(25)] is more readily understood as a complex noun phrase, viz., *a boy who came yesterday*, and is not felicitous under a sentential reading.’ (Halila 1992: 17).

- (25)

wlad	jaa	1-baarih
boy.sg.m	come.perf.3.sg.m	the-yesterday

‘(A/some) boy came yesterday.’

This observation made by Halila (1992) confirms my assumption that bare indefinite nominals are not acceptable in preverbal subject position. Even if a string of words as exemplified in (23) is acceptable by some native speakers of modern Arabic dialects, it is because the phrase after indefinite nominals receives a modificational, rather than predication, interpretation. More research is needed in this regard to address predication after bare indefinite nominals. In the following section, I consider the existential and possessive constructions which both allow bare indefinite nominals to appear in a preverbal position. Since existential and possessive particles commonly precede preverbal indefinite nominals, existential and possessive constructions seem to provide counter evidence to the idea that preverbal subjects cannot be indefinite.

4.2.2 Existential versus locative *feeh*-sentences

In this section, I focus on the distribution and interpretation of existential constructions which always involve indefinite nominals. Bare indefinite nominals can have singular or plural forms in Arabic, and they always encode existential interpretations (Salem 2010). They can occupy argument positions such as postverbal subject position (26) and direct object position (27) as shown in the Makkan Arabic examples.

(26) a. daxal-at **bent** al-ġorfa
 enter.perf-3.sg.f girl.sg.f the-room.sg.f
 ‘A girl entered the room.’

 b. daxal-o **banat** al-ġorfa
 enter.perf-3.pl girl.pl.f the-room.sg.f
 ‘Girls entered the room.’

(27) a. ʃof-t **bent** fi al-ġorfa
 see.perf-1.sg girl.sg.f in the-room.sg.f
 ‘I saw a girl in the room.’

 b. ʃof-t **banat** fi al-ġorfa
 see.perf-1.sg girl.pl.f in the-room.sg.f
 ‘I saw girls in the room.’

As mentioned in the introduction to this chapter, bare unmodified indefinite nominals are not allowed preverbally in Makkan Arabic, and many modern Arabic dialects. To allow them to do so, they can be modified as explained above, or alternatively preceded by the existential particle *feeh* ‘there’:

(28) a. ***banat** daxal-o al-ġorfa
 girl.pl.f enter.perf-3.pl the-room.sg.f
 ‘Girls entered the room.’

 b. *feeh* **banat** daxal-o al-ġorfa
 in-it girl.pl.f enter.perf-3.pl the-room.sg.f
 ‘There are girls (who) entered the room.’

Existential *feeh* has been discussed by many who note that it can only be followed by indefinite nominals (Aoun et al. (2010) in Lebanese Arabic, Abdel-Ghafer and Jarbou (2015) in Jordanian Arabic and Jarad (2015) in Syrian Arabic).³⁶ In the following examples from Lebanese Arabic, we see that this construction allows bare indefinite nominals (24a) and indefinite nominals quantified with *ʕeddit* ‘several/many’ (24c). However, definite nominals (24b), and indefinite nominals quantified with the universal quantifier *kol* ‘all’ (24d, e) and *aḡlabiyyit* ‘most’ (24f) do not follow existential *feeh* ‘there’ since they are all strong determiners according to Milsark’s classification (1997), as stated by Aoun et al.

- (29) a. fii walad/wleed bi-ʕ-ʕaff
 in-it child/children in-the-classroom
 ‘There is a child/are children in the classroom.’
- b. *fii l-walad bi-ʕ-ʕaff
 in-it the-child in-the-classroom
 ‘There is the child in the classroom.’
- c. fii ʕeddit wleed bi-ʕ-ʕaff
 in-it many/several children in-the-classroom
 ‘There are many/several children in the classroom.’
- d. *fii koll walad bi-ʕ-ʕaff
 in-it every child in-the-classroom
 ‘There is every child in the classroom.’
- e. *fii koll l-wleed bi-ʕ-ʕaff
 in-it all the-children in-the-classroom
 ‘There are all the children in the classroom.’
- f. *fii aḡlabiyyit l-wleed bi-ʕ-ʕaff
 in-it most the-children in-the-classroom
 ‘There are most the children in the classroom.’

[Aoun, Benmamoun and Choueiri, 2010: 196]

³⁶ There are phonetic variations in how existential *feeh* is perceived to native speakers of Arabic dialects. I consider *feeh* to be composed of the preposition *fee/fii* and a clitic object pronoun *-h* while others may perceive it as a preposition only, as will be discussed in section 4.2.3 and 4.2.4.

Although definite nominals cannot appear after the existential particle *feeh*, they can appear in locative constructions, which also involve *feeh* but do not encode existential interpretations. More specifically, *feeh* appears in a similar-looking construction in which definite nominals can appear after *feeh* but the interpretation is locative, not existential. A similar property holds of English *there*-sentences as reported by Ward and Birner (1996). They, among others, argue that although definite nominals can occur in English *there*-sentences, these postverbal definite nominals have a deictic presentational or a list reading. The major factor in licensing definite nominals in such English *there*-sentences is the speaker's presumption that the entity represented in the construction is not a part of the shared knowledge of the hearer. They suggest that definite postverbal nominals in *there*-sentences are sensitive to contextual constraints in ways that are different from existential indefinite nominals. Lyons (1999) distinguishes between existential *there* which is followed by indefinite nominals and deictic *there* which is followed by definite nominals as in *there was the man you are looking for, behind the bushes*.

The same distinction between locative and existential *there*-sentences is observed in Arabic *feeh*-sentence. Indefinite nominals appear after existential *feeh* whereas definite nominals appear after deictic *feeh*.

- (30) a. Speaker1: kol al-banat ye-hob-o al-mikyaj
all the-girl.pl.f 3.m-like.imperf-pl the-makeup.sg.m
'All girls like make up.'
- Speaker2: laa, feeh banat ma ye-hob-o al-mikyaj
no in.it banat NEG 3.m-like.imperf-pl the-makeup.sg.m
'No, there are girls (who) do not like makeup.'
- b. Speaker1: te-htaaj-i musaʕada fi tajheezat al-ḥafla
2.f-need.imperf-sg help.sg.f in preparation.pl.f the.party.sg.f
'Do you need help with the party preparations?'
- Speaker2: feeh al-banat hina ʕaʕan ye-saʕd-o-ni
in.it the-girl.pl.f here 3.m-help.imperf-pl-3.sg
'The girls are here, so they can help me.'

As observed in the examples, while definite nominals are accepted in Makkan Arabic *feeh*-sentences, they lose their existential interpretation and receive a presentational or literal locative/deictic meaning. The semantic distinction between existential *feeh* and deictic *feeh* is syntactically reflected by the negation particle that appears before each construction. Existential *feeh* selects the verbal/sentential negation particle *ma* while deictic *feeh* selects the non-verbal negation particle *mu*.

- (31) a. *ma/*mu* *feeh* *banat* *ma* *ye-ħob-o* *al-mikyaj*
 NEG in.it girl.pl.f NEG 3.m-like.imperf-pl the-makeup.sg.m
 ‘There are no girls (who) do not like makeup.’
- b. **ma/mu* *feeh* *al-banat* *hina* *ʕaʕan* *ye-saʕd-o-ni*
 NEG in.it the-girl.pl.f here 3.m-help.imperf-pl-3.sg
 ‘The girls are not here, so they could help me.’

The natural order of the negated locative construction is given in (32a) where the definite nominals precede the locative particle. However, existential *feeh*-sentences cannot appear in this order as shown in (32b).

- (32) a. *al-banat* *mu* *feeh* *hina* *ʕaʕan* *ye-saʕd-o-ni*
 the-girl.pl.f NEG in.it here 3.m-help.imperf-pl-3.sg
 ‘The girls are not here, so they could help me.’
- b. **banat* *ma* *feeh* *ma* *ye-ħob-o* *al-mikyaj*
 girl.pl.f NEG in.it NEG 3.m-like.imperf-pl the-makeup.sg.m
 ‘There are no girls (who) do not like makeup.’

Based on the syntactic behaviours of the existential particle *feeh*, I argue in section 4.2.4 that the existential particle *feeh*, and possessive particles introduced in section 4.2.3 below, are better analyzed as verbs, especially that they take verbal negation. The existential particle and the following indefinite nominals together result in a complete sentence. Before I present the analysis that I propose for the existential construction headed by *feeh* in Makkan Arabic, I introduce the possessive constructions. The major shared property between existential and possessive constructions is that the existential and possessive particles both select indefinite

nominal complements. In section 4.2.4 below, I discuss the main similarities and differences between the two constructions.

4.2.3 Possessive particles

There are other particles, besides *feeh*, that can also encode abstract non-deictic interpretations (and be followed by indefinite nominals) in addition to their locative interpretations (in which they are followed by definite nominals). These particles are *ʕendi* ‘with me’, *fee-ya* ‘into me’ and *l-i* ‘for me’, and they frequently encode possession (in addition to their locative meaning), henceforward I refer to them as possessive particles.

Possessive particles share the same distributional properties as existential *feeh*; they select indefinite nominals as their complements (or associates), and they are all negated by the verbal negation *ma*. However, these particles differ from existential *feeh* in the type of object clitic pronoun that can follow them. While *feeh* (or *fe-eh*) always has a third singular pronoun *-eh* attached at the end of the particle, possessive particles can be followed by any object pronouns.³⁷ In the following examples, the possessive particle *ʕendi* is negated with sentential negation *ma* (33b), but when it encodes a literal locative meaning, it is negated with the non-verbal negation *mu* (34).

- (33) a. *ʕendi* *sayar-a* *jadid-a*
 with/by -1.sg car-sg.f new-sg.f
 ‘I have/own a new car.’
- b. *ma* *ʕendi* *sayar-a* *jadid-a*
 NEG with/by-1.sg car-sg.f new-sg.f
 ‘I don’t have a new car.’

³⁷ This observation contradicts Jarad (2015) who argues that existential *feeh* in Syrian Arabic does not have any suffix pronoun at the end because it has been grammaticalized from a preposition, which requires a pronominal or nominal complement, to a pronoun that does not require any complement. I discuss the clause-structure of existential and possessive constructions in section 4.3.7 below where I argue that these particles are grammaticalized from prepositions to verbs.

(34) a. al-bent (mu) ʕend al-bait
 the-girl.sg.f NEG by the-house.sg.m
 ‘The girl is (not) by the house.’

b. *al-bent ma ʕend al-bait
 the-girl.sg.f NEG by the-house.sg.m

The other two possessive particles share the same distributional properties as *ʕend*. They are followed by indefinite nominal complements and are negated with the verbal negation *ma* (35a) while the non-verbal negation particle *mu* precedes the locative preposition (35b). Note that *feeh* can be used as an existential particle that has a fixed form and can also be used as a possessive particle that allows various object pronouns. Possessive *fee* is preceded by verbal negation *ma* (36a) while the locative preposition *fee* is preceded by the non-verbal negation particle *mu* (36b).

(35) a. **ma** l-iya ʃogol bee-ki
 NEG for-1.sg business.sg.m with-2.sg
 ‘I have nothing to do with you (Lit: I do not have business with you.)’

b. al-resala **mu** l-iya
 the-letter.sg.m NEG for-1.sg
 ‘The letter is not for me.’

(36) a. **ma** fee-ya heel a-rooh
 NEG in-1.sg energy.sg.m 1-go.imperf.sg
 ‘I have no energy to go. (Lit: there is no energy in me to go.)’

b. al-ṭabʕ da **mu** fee-ya
 the-trait this NEG in-me
 ‘This trait is not in me.’

There is one last point that is worth considering regarding the distribution of existential *feeh* and the possessive particles. The indefinite nominals that appear in these constructions are usually followed by, and construed as subjects of, sentential predicates, as shown by the (b) examples (37-40) below. I will discuss my analysis of these constructions which involves the raising of an argument out of an embedded clause to become the object in the main clause in section 4.2.4 below.

- (37) a. *feeh bent*
 in-it girl.sg.f
 ‘There is a girl.’
- b. *feeh bent fi al-ḡorfa/ te-dog al-bab/ dagat al-bab*
 in-it girl.sg.f in the-room.sg/ 3.f-knock.imperf.sg the-door/knock.perf.3.sg the-door
 ‘There is a girl in the room/knocks on the door/knocked on the door’
- (38) a. *ʕendi sayar-a*
 with-1.sg. car-sg.f
 ‘I have a car.’
- b. *ʕendi sayar-a jadida/te-stahl-ik banzeem kateer/ xarabt mizanyat-i*
 with-1.sg. car-sg.f new.sg.f/3.f-consume.imperf gas/ ruin.perf.3.sg.f budget-1.sg
 ‘I have a new car/ consumes a lot of gas/ ruined my budget.’
- (39) a. *fee-ki ʕai*
 in-2.sg.f thing.sg.m
 ‘There is something with you.’
- b. *fee-ki ʕai ḡareeb/xawaf-ni/ ma-neʕrf-u*
 in-2.sg.f thing.sg.m strange.scare.perf.3.sg.m-1.sg NEG-1-know.imperf.sg-3.sg.m
 ‘There is something strange with you /scares me/we don’t know.’
- (40) a. *le-ha nafs*
 to-3.sg.f desire.sg.f
 ‘She has a desire.’
- b. *le-ha nafs te-rooḥ al-ḥafl-a*
 to-3.sg.f desire.sg.f 3.f-go.imperf.sg the-party-sg.f
 ‘She has a desire to go to the party.’

As shown in the examples of this section and section 4.2.2. above, these existential and possessive particles developed distinct semantic content, grammatical categories and syntactic functions while retaining their original status as locative prepositions.

Before laying the analysis of existential *feeh* and possessive particles in Makkan Arabic, I shed light on the link between the three structures of locative, existential and possessive and the definiteness effect that has been also attested cross-linguistically. More specifically, there are many studies that assume a link, which is influenced by definiteness, between the three

constructions of existential “*there is a car*”, possessive “*I have a car*” and locative constructions “*the car is there*”. One such study is conducted by Freeze (1992) who argues that existential *there*-constructions and possessive *have*-constructions in English structurally resemble locative constructions. The example in (41) illustrates the three constructions that are hypothesized to share the same underlying D-structure.

- (41) a. Predicate locative: The book is on the bench.
 b. Existential: There is a book on the bench.
 c. 'Have': Lupe has a book (= By Lupe is a book)

[Freeze, 1992:553]

Freeze highlights the effect of definiteness on the locative construction on one hand, and the existential and possessive constructions on the other hand.

“A theory is proposed that unites the universal locative paradigm consisting of the predicate locative, the existential, and the 'have' predication. This is accomplished by deriving all three from a single underlying structure in which a preposition is the head of the predicate phrase. The existential and the 'have' structure, both having a derived locative subject, are differentiated from the predicate locative by the definiteness effect”.

[Freeze, 1992:553]

In another similar study, Harley (2002) argues that possession, at least in some languages, is underlyingly expressed through prepositions. A similar link is observed in this dissertation as I propose that locative prepositions in Makkan Arabic such as *fee* ‘in’ and *ʕend* ‘by’ can have existential and possessive interpretations when they are followed by indefinite nominals. In section 4.2.4 below, I argue that these particles (existential and possessive) are better analyzed as verbs that select indefinite nominals as internal arguments.

4.2.4 The clause structure of existential and possessive sentences

In this section, I propose that the existential and possessive particles in Makkan Arabic are heads of verbal projection vP and that they select indefinite nominals as internal arguments. This proposal is compatible with the idea that bare unmodified indefinite nominals cannot occur preverbally since I suggest existential and possessive particles are verbs that govern the indefinite

nominals. The proposal also goes in line with the analysis of Halila (1992) on Tunisian Arabic and Eid (1993) on Egyptian Arabic. An alternative analysis is proposed by Jarad (2015) on Syrian Arabic and Abdel-Ghafer and Jarbou (2015) on Jordanian Arabic in which existential and possessive particles are considered pronouns. I review these analyses then argue against them maintaining that such particles are better analyzed as verbs.

Jarad (2015) discusses the difference between existential *feeh*-sentences and locative prepositions in Syrian Arabic, which is spoken in Aleppo. Jarad first reviews the uses of the original (non-grammaticalized) preposition *feeh* in Arabic as a locative marker (42a), temporal marker (42b) and a figurative marker (42c).

(42) a. bayt-na fii al-ṭabeʔ al-taani
 house-1.pl on/in the-floor.sg.m the-second
 ‘Our house is on the second floor.’

b. fii axir al-ṣayf
 at end.sg.f the-summer.sg.m
 ‘At the end of summer’

c. jar-na bi-yi-ḥtigil fii al-ziraaʕa
 neighbor-1.pl prog-3.m-work.imperf.sg in the-farming.sg.f
 ‘Our neighbor works in the farming business.’

[Jarad, 2015:243]

Jarad points out that the preposition *feeh* has developed various interconnected meanings such as the locative and temporal ones because it is commonly and frequently used by Arabic speakers. Over time these physical or concrete meanings (e.g. locative and temporal) have undergone grammaticalization such that they have developed more abstract semantic content such as is found in the existential constructions. The grammatical category of *feeh* has also changed from a preposition to a non-referential existential “pronoun”, according to Jarad’s analysis (see also Mohammad 1998; 2000 and Hoyt 2000). Jarad assumes that there is no object clitic attached to the end of *feeh* which contradicts my assumption in this dissertation and also the assumptions of Hoyt (2000) and Mohammad (1998, 2000), among others. Jarad views the lack of an object clitic as part of the grammaticalization process, assuming that since the existential pronoun is no

longer a preposition, it does not require an object clitic.³⁸ Jarad also adds that the grammaticalization process extends to other prepositions in Arabic especially the ones indicating possessions such as *ʕand* ‘by’.

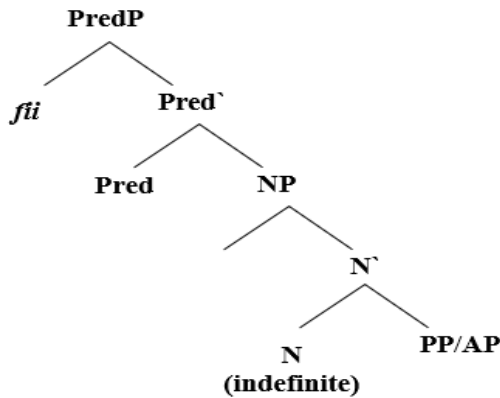
- (43) ḥasan ma ʕand-u sayyara
 Hassan NEG by-3.sg.m car.sg.f
 ‘Hassan does not have a car.’

[Jarad, 2015:247]

Jarad focuses on providing syntactic descriptions of the difference between locative prepositions and existential particles but does not give a detailed analysis of these particles. Jarad briefly mentions that these particles are existential pronouns, and the indefinite nominals are nominal predicates, and together they form a verbless/copular sentence; “The paper argues that the preposition *ʕi* has assumed the function of an existential pronoun that is used as a subject to license an indefinite subject in a verbless/nominal sentence” (Jarad, 2015: 237). However, Jarad does not provide an analysis that he assumes for verbless sentences. In the diagram that I provide for clarification (44), I use the PredP since it is commonly used to represent verbless sentences in Arabic (Benmamoun 2008, Hazout 2010 and Choueiri 2016, among others). Additionally, I use PredP to compare the analysis of Jarad (2015) with that of Abdul-Ghafer and Jarbou (2015) which is provided in the following page.

³⁸ This conflict whether the particle *feeh* is followed by an object clitic or not is enhanced by the phonetic similarities between the particle followed by the clitic (fee-eh) or the particle by itself (fee). Because the clitic is a voiceless glottal fricative, it may be hard to hear the sound at the end of the word as well.

(44)



In spite of analyzing existential and possessive particles as pronouns, Jarad suggests in another part of the study that these particles exhibit some verbal properties; “I suspect that the existential “fi” is undergoing a process of grammaticalization as a quasi-verbal predicate; hence, it attracts the negative particle “ma”, which is usually used with verbal predicators (Jarad, 2015: 247). Jarad does not explain why the grammaticalized existential *feeh* appears with the verbal negation *ma* rather than with the non-verbal negation particle (*mif* in Syrian Arabic) that usually appear before non-verbal elements (45), nor does he explain how such verbal properties are compatible with the proposed analysis of *fii* as existential pronouns.

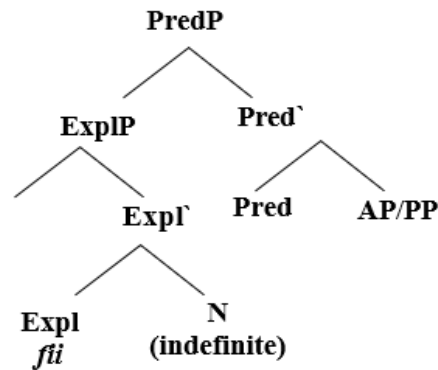
- (45) ma fii ʔittā taht al-ṭawli
 NEG-there cat.sg.f under the-table.sg.f
 ‘There is no cat under the table.’

[Jarad, 2015:245]

Another account for existential *feeh*-sentences is presented by Abdel-Ghafer and Jarbou (2015) in Jordanian Arabic. Abdel-Ghafer and Jarbou consider the existential construction, which is composed of the existential expletive *feeh* and the indefinite nominal complements, as an extended nominal projection. More specifically, the existential expletive *feeh* heads its own projection which is the Expletive Phrase (ExplP) with the indefinite nominal as a complement of the Expl head. The ExplP is merged in the specifier position of a Predicate Phrase (PredP).

- (46) a. *fii* *walad* *bi-id-daar*
 there boy.sg.m in-the-house.sg.m
 ‘There is a boy in the house.’

b.



[Abdel-Ghafer and Jarbou, 2015: 168]

Under this analysis, the string of existential *feeh* and the indefinite nominals is considered a nominal projection without any verbal elements. However, one argument against analyzing *feeh* and its indefinite complement as a nominal projection is that *feeh* and the indefinite complement can stand alone and get interpreted as a full sentence that takes a verbal negation. It is unclear under Abdel-Ghafer and Jarbou's analysis why the nominal projection can receive sentential interpretation when standing alone.

- (47) (ma) *feeh* *awlad*
 NEG in.it boy.pl.m
 ‘There are no boys.’

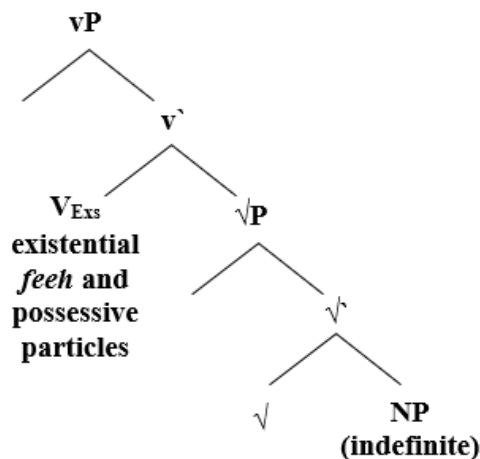
Although I find the idea that *feeh* has undergone grammaticalization convincing, I believe it has taken on the category of a verb, not a pronoun.³⁹ This perspective is shared by other Arab linguists who categorize existential *feeh* as a verbal or quasi-verbal predicate (Halila 1992 in Tunisian Arabic and Eid 1993 in Egyptian Arabic) especially because it appears after verbal negation. Eid (1993), who argues that particles like *feeh* have developed a new grammaticalized

³⁹ Technically, the change of category from preposition to verb is not an instance of a lexical item taking on grammatical functions, which is the essence of grammaticalization. The precise nature of this diachronic change remains to be explored in future work.

verbal form, explains that languages usually fill the gaps of the missing forms by other available forms. Because Arabic lacks verb forms for the verb *have* and the copular verb *be* in the stative present tense, some of the functions that are usually associated with verbs can be carried out by these existential and possessive particles. Thus, existential and possessive particles that are usually negated with non-verbal negation, when interpreted as prepositional phrases, can be negated with verbal negation. I consider the existential *feeh* and the possessive particles to be verbs that are followed by indefinite nominal complements (i.e., direct objects) as I explain below. I also suggest that such nominal complements can be followed by raising predicates in which embedded subjects raise to be objects of the main clause.

Following Halila (1992) and Eid (1993), I argue that the existential and possessive particles are used as verbal elements. Under the Distributed Morphology framework, these elements are Roots ($\sqrt{P}$) that are selected by the little existential v head (v_{Exs}) rather than by the head p as is the case with locative prepositions. These existential verbalized particles select indefinite nominals (NPs) as their internal arguments, as shown in (48). I provide the analysis of *feeh*-constructions and of possessive constructions separately to address the differences in the clitic object pronouns. More specifically, while *feeh* (or *fe-eh*) is an invariant form with only the third person masculine clitic attached, possessive particles may have various object clitics attached to them. Additionally, existential *feeh* cannot be preceded by overt subjects whereas possessive particles can.

(48)



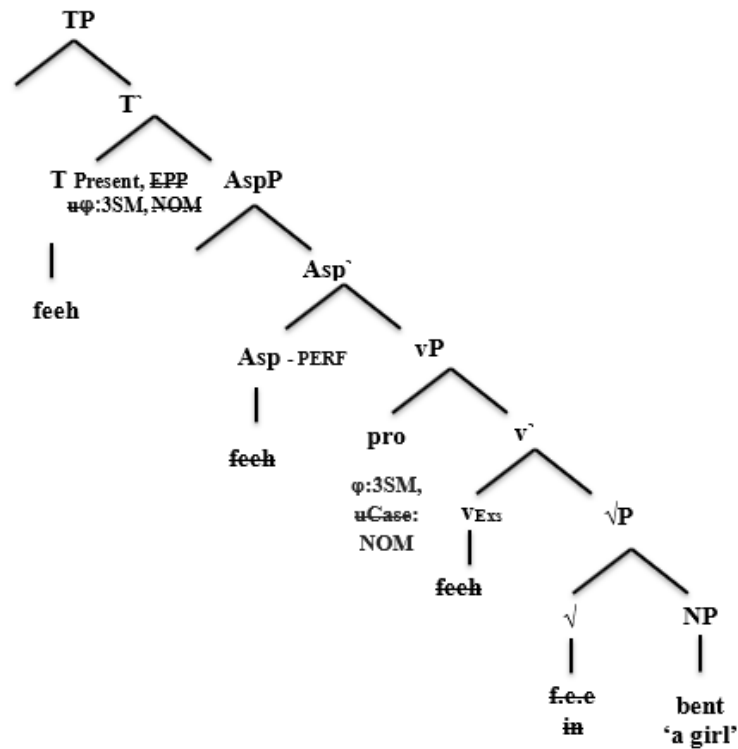
To present an analysis of the existential *feeh*-structures, there are several issues that must be addressed. First, only indefinite nominals are allowed after the existential *feeh* as mentioned earlier (49a). Second, the existential structure is negated by the verbal negation *ma* (49b) rather than the lexical negation *mu* (49c).

- (49) a. *feeh* *bent* *daga-t* *al-bab*
 in-it girl.sg.f knock.perf.sg.f the-door.sg.m
 ‘There is a girl knocked on the door.’
- b. *ma* *feeh* *bent* *daga-t* *al-bab*
 NEG in-it girl.sg.f knock.perf.sg.f the-door.sg.m
 ‘There is no girl knocked on the door.’
- c. **mu* *feeh* *bent* *daga-t* *al-bab*
 NEG in-it girl.sg.f knock.perf.sg.f the-door.sg.m
 ‘There is no girl knocked on the door.’

Third, existential *feeh* always carries the third person singular masculine object pronoun (*fe-eh*), as pointed out earlier in section 4.2.2, and does not allow any other object pronouns. This consistent form of the object pronoun clitic leads some linguists, such as Jarad (2015), to assume that the particle is not followed by any clitic. By considering *feeh* to be an existential verb, I suggest that the third-person singular masculine object pronoun is an agreement suffix that agrees with a null expletive subject pronoun in [Spec, vP]. The existence of a null expletive subject explains the invariant agreement on *feeh*. The indefinite nominal NP complements occupy the internal argument position of the existential verb *feeh*.

- (50) a. *feeh* *bent*
 in.it girl.sg.f
 ‘There is a girl.’

b.



The indefinite nominals that occur as complements of *feeh* can themselves be modified by an adjective or prepositional phrase (51) or be subjects of an embedded clause which raise to become the object of *feeh* in the main clause (52).

(51) a. *feeh bent jaded-a*
 in-it girl.sg.f new-sg.f
 'There is a new girl.'

b. *feeh bent fi al-ğorfa*
 in-it girl.sg.f in the-room.sg
 'There is a girl in the room.'

(52) *feeh bent te-dog/ dagat al-bab*
 in-it girl.sg.f 3.f-knock.imperf.sg/knock.perf.3.sg the-door
 'There is a girl (that) knocks /knocked on the door'.'

As for the possessive particles, I suggest that possessive constructions share the same clause structure as existential-*feeh* construction except that the subject of the matrix clause is not

obligatorily a null expletive subject but can be any nominal or pronominal overt subject as well. More specifically, I suggest the particles *ʕend* ‘with’, *fee* ‘in’ and *li* ‘for’ are Roots that combine with the category-defining head v_{Exs} , and thus function as verbal elements when they express possession. Unlike existential *feeh* which always bears fixed default agreement (third person singular masculine agreement) with a null expletive subject, these verbal possessive elements bear agreement suffixes that match overt or null subjects. Note that *feeh* can be used as a possessive particle and thus accepts an overt subject (53c), but such sentences do not encode existential interpretation.

- (53) a. *feeh* *bent* *jaded-a*
 in-it girl.sg.f new-sg.f
 ‘There is a new girl.’
- b. (al-bent) *ʕend-ha* *sayara* *jaded-a*
 the-girl.sg.f with.3.sg.f car.sg.f new-sg.f
 ‘(The girl) has a new car.’
- c. al-sayara *fee-ha* *muʃkil-a* *jaded-a*
 the-car.sg.f in-3.sg.f problem.sg.f new-sg.f
 ‘(The car) has a new problem.’

There are two aspects that show the verbal nature of these possessive particles. First, the possessive construction is negated with the verbal negation *ma* rather than the non-verbal negation *mu*. The following example illustrates the difference between *ʕend-i* ‘with me’ as a locative preposition (54a) and as a possessive verb (54b).

- (54) a. Speaker1: *feen* *al-galm?*
 where the-pen.sg.m
 ‘Where is the pen?’
- Speaker2: **mu** *ʕend-i,* *kol* *al-aglam* *ʕend* *nada*
 NEG with-1.sg all the-pen.pl.f with Nada
 ‘(It is) not with me. All pens are with Nada.’

b. Speaker1: feen al-galm?
 where the-pen.sg.m
 ‘Where is the pen?’

Speaker2: **ma** ʕend-i wala galm bas nada ʕend-ha
 NEG with-1.sg any pen.sg.m but Nada with-3.sg.f
 ‘I don’t have any pen, but Nada does.’

Second, I suggest that the suffixes on the possessive verbs *ʕend-i* are better analyzed as agreement inflections not pronominal objects. In (55a) we see that the possessive particle *ʕend* ‘with’ cannot be followed by a full nominal. Instead, the particle is restricted to pronominal clitics. I propose that these suffixes are not object clitics but are agreement inflections that appear on the possessive verb *ʕend* and that match preverbal (55b), postverbal (55c) or null subject (55d).

- (55) a. *ʕend al-wald sayara
 with the-boy.sg.m car.sg.f
- b. al-wald ʕend-u sayara
 the-boy.sg.m with.3.sg.m car.sg.f
 ‘The boy has a car.’
- c. ʕend-u al-wald sayara
 with.3.sg.m the-boy.sg.m car.sg.f
 ‘The boy has a car.’
- d. ʕend-u sayara
 with.3.sg.m car.sg.f
 ‘(He) has a car.’

Analyzing the possessive particles as verbs (that are selected by the category-defining head v_{EXS}) and the pronominal suffixes as agreement inflections provides a unified account for the existential and possessive constructions. The analysis is in line with Eid’s (1993) suggestion that these forms are verbs rather than prepositions or pronouns, and that they fill the gap of existential and possessive verbal forms in the Arabic.

4.3 Position and derivation of preverbal subjects

In this dissertation, I adopt Cardinaletti's (1997, 2004) Subject of Predication projection (SubjP) and suggest that preverbal nominals in Makkan Arabic occupy the specifier position of [Spec, SubjP], and that they are derived by a successive movement from [Spec, vP] to [Spec, SubjP] passing through [Spec, TP] and [Spec, AspP] to satisfy the SoP feature.

4.3.1 Position of preverbal subjects

The proposal that preverbal nominals in Makkan Arabic occupy the specifier position of [Spec, SubjP] goes against two common conflicting approaches in analyzing preverbal nominals in Arabic and cross-linguistic studies, the subject approach versus the topic approach.

According to one approach, preverbal nominals are subjects occupying the argument position in [Spec, TP] and derived by movement. Most studies that investigate Arabic SVO sentences implicitly assume that the preverbal nominals are structural subjects that occupy [Spec, TP] (Mohammad 1990, 2000; Benmamoun 1992, 1996, 1999, 2000, 2008; Fassi Fehri, 1993; Aoun et al. 1994; Ouhalla 1994; Harbert and Bahloul, 2002; Musbahien, 2008; Aoun et al. 2010; Al-Daher 2016; Al-Qahtani, 2016; Sahawneh 2017, Alahdal 2018, among others), or [Spec, AgrP] according to Ouhalla (1994).⁴⁰ As is the case with Arabic, the subject-topic dilemma holds in other null-subject languages, including Italian, Spanish and Russian. Similarly, a group of studies argue that preverbal nominals are genuine subjects in these languages (Cardinaletti, 1997, 2004; Goodall, 2002; Suñer, 2003; Camacho, 2006; Sheehan, 2007; Camacho, 2013, among others).

One problem with this approach is that it considers preverbal subjects in languages like Arabic to be similar to preverbal subjects in languages like English in terms of position and motivation for derivation. Subjects in SVO sentences undergo movement from [Spec, vP] to

⁴⁰ Ouhalla (1994) suggests that preverbal subjects in Arabic occupy [Spec, AgrP] while verbs occupy the head of Tense. The different orders of VSO and SVO results from differences in the order of Tense and Agreement projections. That is, T is higher than Agr in VSO while in SVO, Agr is higher.

[Spec, TP] to satisfy the EPP feature. While this assumption is justified in English, for example, because an overt subject is obligatory in preverbal position, the situation in Arabic is different. Arabic does not require overt subjects in preverbal position since sentences lacking overt subjects and sentences in VSO order are both acceptable. As a result, Arabic sentences with overt subjects in preverbal position cannot be structurally similar to their counterpart sentences in English.

The other approach in analyzing Arabic preverbal nominals maintains that preverbal nominals are topicalized/left-dislocated phrases that are base-generated in a non-argument position. This approach of analyzing preverbal nominal as topics, known as the topic approach, is first presented in Arabic by the traditional Basran school of Arabic grammar in the eighth century. According to many traditional Arabic grammarians and some modern Arab linguists, Arabic is mainly a VSO language, and only postverbal nominals are genuine subjects. (Eid 1975; Hassan 1975; Al-Makhzomi 1986; Alazzawi 1990; Al-Samurra'i 2001; Soltan, 2006, 2007, Al-Kawari 2008, Al-Horais 2009, Al-Balushi 2011, 2012; Fakihi 2016; Jarrah 2020, in Arabic and Barbosa, 1995, Alexiadou and Anagnostopoulou, 1998; Ordóñez and Treviño, 1999; Frascarelli, 2007 cross-linguistically). In this approach, preverbal nominals are topics (*mubtadaʿ*) that are co-indexed with a null pronominal subject after the verb. The modern generative version of the topic approach maintains that preverbal nominals are left-dislocated elements that are base-generated in non-argument position and are co-indexed with a null subject pronoun in a [Spec, vP] position.

This topic approach offers two views on the position of left-dislocated topics in Arabic. Soltan (2006, 2007), Al-Horais (2009) and Al-Balushi (2011, 2012) all maintain that preverbal nominals are left-dislocated topics that are base-generated in [Spec, TP]. More specifically, the specifier of TP is considered, under this approach, to be an A-bar position. However, this assumption contradicts the standard view that [Spec, TP] is an A-position that is occupied by subjects, not topics. Another suggestion for the position of topicalized/left-dislocated nominals in Standard Arabic is suggested by Musbahien (2008), Fakihi (2016) and Jarrah (2020) who argue that these topicalized phrases do not occupy [Spec, CP] nor [Spec, TP] positions. Based on the Agree-based approach and on Rizzi's (1997) CP-split, they suggest that preverbal nominals move from [Spec, vP] to a projection between CP and TP which is Topic Phrase (TopP). This movement to [Spec, TopP] is motivated by an edge feature that is inherited from C. However, the

claim that all preverbal nominals in Arabic are left-dislocated topics is unjustified. In this dissertation, I provide evidence that there are two different preverbal positions that nominals can occupy: [Spec, SubjP] and [Spec, TopP].

One more approach, which is the one I adopt in this dissertation, is suggested by a small group of Arab linguists in which preverbal nominals can be interpreted as subjects and as topics (Fassi Fehri 1993; Musbahien 2008; Alahdal 2018). I refer to this approach as the dual approach since preverbal nominals may carry both interpretations, of subjects and of topics. Fassi Fehri (1993) explains that preverbal nominals in Arabic can function either as subjects that occupy [Spec, TP] or as topics that occupy [Spec, CP]. Similarly, Alahdal (2018), who builds his account within the feature-inheritance framework (Chomsky 2005), proposes that preverbal nominals in Standard Arabic (and other null-subject languages) exhibit A- and A-bar properties. Alahdal argues that this hybrid nature is derived by an optional Edge Feature (EF) that can be inherited by the head T from C.

“I have argued that the preverbal DP in NSLs (Null-Subject Languages) is a subject in [Spec, TP] that also has a topic interpretation. Formally, [Spec, TP] in NSLs is an A-position which becomes an A-bar position when T inherits the feature EF from C. This explains the fact that preverbal subjects in NSLs exhibit A-bar properties. The feature EF used here is an edge feature that a phase head may have, satisfied by movement of a discourse-related element to the spec position of the respective head”.

[Alahdal, 2018: 44]

However, this proposal is rejected by Jarrah (2020) who alternatively proposes that preverbal nominals are interpreted either as Topics or Focus depending on the content information (For more details on the arguments and theoretical proposals, review Alahdal (2018) and Jarrah (2020) on preverbal nominals in Standard Arabic).

In this dissertation, I adopt a dual approach inspired by Cardinaletti’s (1997, 2004) framework in which it is suggested that preverbal nominals in NSLs move to an A-position in [Spec, SubjP] (between CP and TP), and that this movement is not motivated to satisfy EPP. Cardinaletti argues that in Italian and other NSLs, overt subjects can move from their postverbal base position to a preverbal position above TP, and this phrasal movement takes place to satisfy the Subject of Predication feature. Accordingly, the position of preverbal subjects in languages

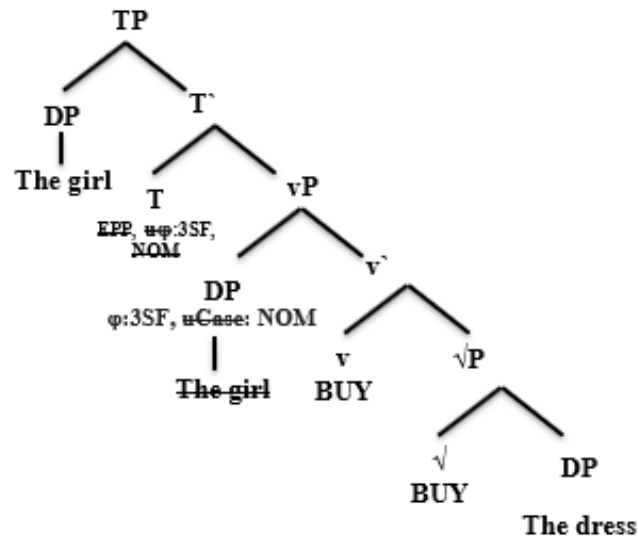
like Italian (that allow subjects to be null) and languages like English (that require overt subjects) are different. While preverbal subjects move from [Spec, vP] to [Spec, TP] position in the latter, preverbal subjects move to the specifier position of Subject of Predication projection passing through [Spec, TP] in the former (See section 2.3 for more details on the Subject of Predication projection). Cardinaletti preserves [Spec, TP] in languages like Italian for weak and null pronouns that cannot move further to [Spec, SubjP].

I depart from Cardinaletti's proposal as I suggest that [Spec, TP] in Makkan Arabic is preserved for the copy of the phi-features of the moved subject which can be optionally spelled out as resumptive subject pronouns. Nominals can move from postverbal position in [Spec, vP] to [Spec, SubjP] or continue to [Spec, TopP]. In section 4.4, I show that not all nominals can get topicalized to [Spec, TopP]. In the next section below, I illustrate the derivation that I suggest for SVO sentences in Makkan Arabic by employing the SubjP projection and adopting a movement approach. Subjects in SVO sentences are derived by successive movement from lower subject position to [Spec, SubjP] which hosts preverbal subjects in Arabic.

4.3.2 Derivation of preverbal subjects

To derive a sentence such as *the girl bought the dress* in English as illustrated in (56), in accordance with the assumptions that I am making in this dissertation, an Agree relation is established between T and the subject *the girl* in its thematic position in [Spec, vP]. The uninterpreted phi-features on T and unvalued Case feature on *the girl* are valued as a result. The subject *the girl* gets its nominative Case feature valued, after which *the girl* moves to [Spec, TP] to satisfy the EPP feature. Note that I am not including information about tense/aspect in this diagram.

(56)



However, unlike English, I assume that subjects in Arabic are not required to move to [Spec, TP] to check the EPP feature (Review section 2.6.2 in Chapter 2 for more details on my assumptions on subject movement in Arabic SVO sentences). I assume that subjects in Arabic can either stay in their thematic lower position or move to a preverbal position to derive SVO sentences. Chomsky (2005) briefly discusses this optionality but does not specify why subjects can stay in situ and what motivates subjects to move if not to satisfy EPP. “If C-T agrees with the goal DP, the latter can remain in situ under long-distance Agree, with all uninterpretable features valued; or it can raise as far as Spec-T, at which point it is inactivated, with all features valued, and cannot raise further to Spec-C. We thus derive the A- $\bar{A}$ distinction.” (Chomsky, 2005:144).

Under the assumption that the EPP feature is satisfied in Makkan Arabic as a result of verb movement to T, there must be a motivation other than the EPP to trigger postverbal subjects to move to a position above verbs in SVO. In this dissertation, I suggest that this movement is an optional movement that is motivated to satisfy the Subject of Predication (SoP) feature on the head of the Subject of Predication Phrase (SubjP). Such subject movement conveys various information structures in which subjects are emphasized differently. That is, subjects can appear in postverbal position, or not appear at all, when the speaker does not emphasize the role played by this nominal in the context of the sentence. By contrast, speakers can choose to move thematic

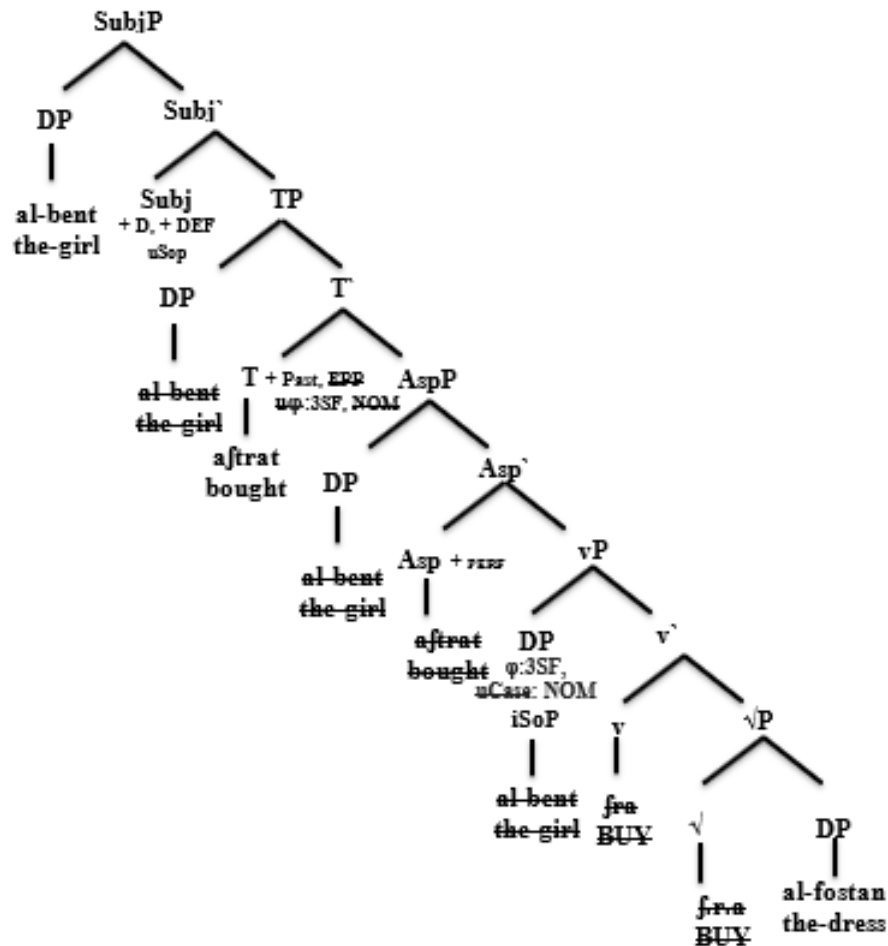
subjects to preverbal position to emphasize their role as more prominent in the context of the sentence. I propose that the specifier position of SubjP is an argument position that attracts definite nominals (subject nominals as I show in this chapter or non-subject nominals as I show in Chapter 6) that carries the interpretable feature *iSoP* to undergo movement to the specifier of SubjP to check the uninterpretable edge feature *uSoP* on the head Subj.

In (57) I give the derivation of the sentence in Makkan Arabic that is equivalent to the English one in (56). Starting with the Root, we see that it moves to the category-defining head *v* then to Asp (which bears the feature [$\pm$ PERF]) then to T (which bears the tense and EPP features). This verb movement satisfies the EPP feature and provides the template for spelling out the verb. Agree is established between T and subject *al-bent* ‘the girl’ in [Spec, vP]. The uninterpreted phi-features on T are valued and interpreted by matching them with their interpretable counterparts on the subject. The unvalued nominative Case feature on *al-bent* ‘the girl’ is valued as a by-product of Agree. To achieve the SVO order, the subject *al-bent* ‘the girl’ moves from its postverbal position in [Spec, vP] to [Spec, SubjP] passing through [Spec, TP] and [Spec, AspP] leaving pronounceable resumptive copies of the phi-features in the lower subject positions in [Spec, vP], [Spec, AspP] and [Spec, TP] (See sections 2.5 and 3.4.1 above for details on the conditions of pronouncing resumptive copies).⁴¹

- (57) a. *al-bent* *aʃtrat* *al-fostan*
 the-girl.sg.f buy.perf.sg.f the-dress.sg.m
 ‘The girl bought the dress.’

⁴¹ In diagram (57b), following the assumptions made in this dissertation (see section 2.6.4), I assume that the verb *aʃtrat* ‘she bought’ is a Root (*/r.a*) that is verbalized after movement to the head *v* (*/ra*). This verb gets its morphological pattern when it moves to the head Asp and its tense feature when it moves to T. I provide Arabic forms and their translation in the terminal nodes of *v* and Asp only for convenience.

b.



I argue next that nominals in Arabic can move further to the left-periphery and get topicalized. That is, while I argue the preverbal nominals are not necessarily left-dislocated nominals, I do not eliminate the option that they can be topicalized. I elaborate more on the CP domain and on topicalized nominals in section 4.4 below.

4.4 Spec, TopP: Left-Dislocation Position

Soltan (2006, 2007) and Al-Balushi (2011, 2012) argue that all preverbal nominals in Arabic are left-dislocated phrases in [Spec, TP]. To define clitic left-dislocation, Cinque (1990) explains that left-dislocated nominals occupy a non-argument pre-clausal position and are co-indexed with a

resumptive pronominal occurring in various argument positions in the clause. Thus, direct objects, for example, can get left-dislocated to a pre-clausal position and be co-referential with a resumptive pronoun in the base object position. Under this definition, the following example in (58) represents object left-dislocation in Makkan Arabic.

- (58) al-bent foft-ha fi al-ħafla
 the-girl.sg.f see.perf.1.sg-3.sg.f in the-party.sg.f
 ‘The girl, I saw her at the party.’

The topic approach, which is embraced by Soltan (2006, 2007) and Al-Balushi (2011, 2012), among others, adheres to the idea that preverbal subjects are always instances of left dislocation. In other words, subjects get left-dislocated from their postverbal canonical position to a pre-clausal non-argument position, which is known as subject left dislocation. In this section, I argue that the left-dislocation position is in TopP a position above TP and SubjP. Additionally, I argue that although preverbal nominals can be left-dislocated to TopP, they do not always move to this position. A similar perspective is held by Al-Qahtani who states “I agree with Al-Balushi and others that there are topic DPs in Arabic, like any other natural language. However, these DPs occupy a syntactic position which is different from the preverbal subject position” (Al-Qahtani, 2016:35).

In support of this proposal, I provide data from Makkan Arabic which demonstrates an asymmetry between two preverbal positions: the position before *wh*-phrases and the position after *wh*-phrases. That is, while definite nominals such as *al-wald* ‘they boy’, for example, can occur before and after *wh*-phrases, bare negative quantifiers such as *maħad* ‘nobody can only occur after *wh*-phrase.

- (59) a. leef **al-wald** (ma) fehm al-dars ams
 why the-boy.sg.m (not) understand.perf.sg.m the-lesson.sg.m yesterday
 ‘Why did/didn’t the boy understand the lesson yesterday?’
 b. **al-wald** leef (ma) fehm al-dars ams
 the-boy.sg.m why (not) understand.perf.sg.m the-lesson.sg.m yesterday
 ‘Why did/didn’t the boy understand the lesson yesterday?’

c. leef **maḥad** fehḥ al-dars ams
 why nobody understand.perf.sg.m the-lesson.sg.m yesterday
 ‘Why didn’t anybody understand the lesson yesterday?’
 (Lit: why did nobody understand the lesson?)

d. ***maḥad** leef fehḥ al-dars ams
 nobody why understand.perf.sg.m the-lesson.sg.m yesterday

This asymmetry between the two preverbal positions applies to all the bare negative quantifiers *maḥad* ‘nobody’, *wala-aḥad* ‘anybody/nobody’ and *wala-fai* ‘anything/nothing’ which can appear in a preverbal subject position after wh-phrases as in the (a) examples in (60) - (62) below but cannot appear in the position before wh-phrases as shown in the (b) examples.

(60)a. leef **wala-bent** (ma) nam-at?
 why no-girl.sg.f NEG sleep.perf-sg-f
 ‘Why didn’t any girl sleep?’

b. ***wala-bent** leef (ma) nam-at?
 no-girl.sg.f why NEG sleep.perf-sg-f

(61)a. leef **wala-aḥad** (ma) nam?
 why nobody NEG sleep.perf-sg-m
 ‘Why didn’t anybody sleep?’

b. ***wala-aḥad** leef (ma) nam-at?
 no-girl.sg.f why NEG sleep.perf-sg-f

(62)a. leef **maḥad** nam?
 why nobody sleep.perf-sg-m
 ‘Why didn’t anybody sleep.’

b. ***maḥad** leef nam?
 nobody why sleep.perf-sg-m

Another category that cannot appear in the position before wh-phrases is indefinite bare nominals, which also cannot appear in preverbal subject position, as shown in (63) and (64).

(63)a. *meta **bent** nam-at ?
 when girl.sg.f sleep.perf-sg-f
 ‘When did a girl sleep?’

- b. ***bent** meta nam-at?
 girl.sg.f when sleep.perf-sg-f
- (64) a. ***meta** **banat** nam-u?
 when girl.sg.f sleep.perf-pl.m
- b. ***banat** **meta** nam-u?
 girl.sg.f when sleep.perf-pl.m

However, while indefinite nominals that are modified with adjectives (65) and numerals (66-68) and quantified with the weak quantifier *kaza* ‘few’ (69) can appear in a preverbal position after wh-phrases, they cannot appear in the position before wh-phrases.

- (65) a. leef **bent** şageera te-nam mot?axer
 why girl.sg.f little 3.f-sleep.imperf late
 ‘Why does a little girl sleep late?’
- b. ***bent** şageera leef te-nam mot?axer
 girl.sg.f little why 3.f-sleep.imperf late
- (66) a. leef bas **wahda bent** nam-at?
 why only one.sg.f girl.sg.f sleep.perf-sg-f
 ‘Why did only one girl sleep?’
- b. ***wahda bent** leef nam-at?
 one.sg.f girl.sg.f why sleep.perf-sg-f
- (67) a. leef **talata banat** nam-u mot?axer?
 why three girl.pl.f sleep.perf-pl.m late
 ‘Why did three girls sleep late?’
- b. ***talata banat** leef nam-u mot?axer
 three girl.pl.f why sleep.perf-pl.m late
- (68) a. leef **kaza bent** nam-at/u mot?axer?
 why many girl.sg.f sleep.perf-sg-f/pl late
 ‘Why did many girls sleep late?’
- b. ***kaza bent** leef nam-at/u mot?axer?
 many girl.sg.f why sleep.perf-sg-f/pl late
 ‘Why did many girls sleep late?’

By contrast, the categories of strong determiners represented by definite nominals (69), proper nouns (70), pronouns (71), definite nominals quantified by *kol* ‘all’ (72) – (73) and *moŝzam* ‘most’ (74) can all appear in the preverbal subject position after wh-phrases and can also appear in the position before wh-phrases.

- (69) a. meta **al-bent** nam-at?
 when the-girl.sg.f sleep.perf-sg-f
 ‘When did the girl sleep?’
- b. **al-bent** meta nam-at?
 the-girl.sg.f when sleep.perf-sg-f
 ‘When did the girl sleep?’
- (70) a. meta **nada** nam-at?
 when Nada sleep.perf-sg-f
 ‘When did Nada sleep?’
- b. **nada** meta nam-at?
 Nada when sleep.perf-sg-f
 ‘When did Nada sleep?’
- (71) a. meta **hya** nam-at?
 when 3.sg.f sleep.perf-sg-f
 ‘When did she sleep?’
- b. **hya** meta nam-at?
 3.sg.f when sleep.perf-sg-f
 ‘When did she sleep?’
- (72) a. meta **kol al-banat** nam-u?
 when all the-girl.pl.f sleep.perf-pl.m
 ‘When did all the girls sleep?’
- b. **kol al-banat** meta nam-u?
 all the-girl.pl.f when sleep.perf-pl.m
 ‘When did all the girls sleep?’
- (73) a. meta **kol bent** nam-at
 when every girl.sg.f sleep.perf-sg-f
 ‘When did every girl sleep?’

b. **kol bent** meta nam-at
 every girl.sg.f when sleep.perf-sg-f
 ‘When did every girl sleep?’

(74) a. meta **moʃzam al-banat** nam-u?
 when most the-girl.pl.f sleep.perf-pl.m
 ‘When did most the girls sleep?’

b. **moʃzam al-banat** meta nam-u?
 most the-girl.pl.f when sleep.perf-pl.m
 ‘When did most the girls sleep?’

It can be observed from this set of data that the class of nominals that cannot appear before wh-phrases is precisely the class of nominals that are involved in existential constructions. According to the analysis that I adopt in this dissertation, the position after wh-phrases is a preverbal subject position while the position before wh-phrases is preserved for left-dislocated phrases. The data from Makkan Arabic above shows that there is an asymmetry in the distribution of nominal categories in those two positions, which supports my proposal that preverbal nominals do not always occupy the position of left-dislocated phrases. More specifically, the class of nominals that are compatible with the existential and possessive constructions, which are bare negative quantifiers and modified indefinite nominals, can only be subjects but cannot get left-dislocated. This distribution reflects an asymmetry between the two preverbal positions before and after the wh-phrases.

I base my analysis on Rizzi’s (1997) hierarchy of the complementizer layer (CP layer), which represents the left periphery or the A-bar domain that hosts topics, focused elements, interrogatives and relative pronouns. Rizzi suggests that the main function of complementizers is that they connect the proposition, expressed by TP (IP in older terms), with a higher structure, the matrix clause in the case of embedded clauses or the discourse in the case of Root clauses. Complementizers express the type of clause or, more specifically, the specification of Force. Thus, complementizers occupy the specifier of Force Phrase (ForceP) which comes at the top of the hierarchy of the CP layer. At the end of the CP layer, there is TP (or IP) which expresses the specification of finiteness (FinP) “(W)e should think of finiteness as the core IP-related-characteristics that the complementizer system expresses” (Rizzi, 1997:284). Another function of

the CP systems is to host left-dislocated element as focalized or topicalized elements. When the Topic and Focus phrases are present, they are “sandwiched” between Force and Finiteness. Rizzi suggests that *wh*-phrases and fronted focus phrases occupy the specifier of Focus Phrase (FocP) while topicalized and left-dislocated phrases occupy the specifier of Topic Phrase (TopP), above FocP.

Based on the analysis of Cinque (1990), Rizzi makes a distinction between Topic and Focus constituents regarding their distributions. One of the distinguishing properties is that bare quantificational elements such as *nobody* and *all* cannot be topics in left-dislocation constructions (75) but can be focalized (76).

- (75) a. *nessuno, lo ho visto b. *tutto, lo ho fatto
 nobody 3.sg.m 1.sg saw.1.sg everything 3.sg.m 1.sg did.1.sg
 ‘Nobody, I saw him.’ ‘Everything, I did it.’
- (76) a. NESSUNO ho visto b. TUTTO, ho fatto
 nobody 1.sg saw.1.sg everything 1.sg did.1.sg
 ‘Nobody, I saw.’ ‘Everything, I did.’

Also, a Topic can co-occur with *wh*-phrases in a fixed order (Top -Wh) while a Focus cannot co-occur with a *wh*-phrase, which indicates that focalized elements and *wh*-phrases occur in the same position in [Spec, FocP].

- (77) a. A Gianni, che cosa gli hai detto?
 To Gianna, what did you tell him?
- b. *Che cosa, a Gianni, gli hai detto?
 What, to Gianna, did you tell him?
- (78) a. *A GIANNI, che cosa gli hai detto?
 To Gianna, what did you tell him?
- b. *Che cosa, A GIANNI, gli hai detto?
 What, to Gianna, did you tell him?

I will not list all the distinctions between Focus and Topic since this discussion is not directed towards distinguishing topicalized elements from focalized elements but rather

recognizing the main properties that characterize the distribution of Topics according to Cinque (1990) and Rizzi (1997). According to this definition, left-dislocated Topics cannot be bare quantifiers, nor can they occupy a position after *wh*-phrases. As observed from Makkan Arabic data above, bare negative quantifiers in Makkan Arabic can appear in a position after *wh*-phrases, which is a position that is not occupied by topicalized/left-dislocated elements.

In the literature of Arabic syntax, there are many studies that draw conclusions against the subjecthood of preverbal nominals because this clause-initial position can host subjects and non-subjects, such as left-dislocated objects. Soltan (2007) and Al-Balushi (2011) argue that subjects are left-dislocated phrases because subjects and non-subjects can both appear preverbally in Arabic.

- (79) a. al-walad kasara al-bab-a
 the-boy.sg-Nom break.perf-3.sg.m the-door-sg.m-Acc
 ‘The boy broke the door.’
- b. al-bab-u kasara-hu al-walad-u
 the-door-sg.m-Nom break.perf-3.sg.m-3.sg.3 the-boy.sg-Nom
 ‘The door, the boy broke the door.’

[Al-Balushi, 2011: 98]

Most Arabic scholars consider (79b) above an example of left-dislocation in which a nominal is fronted to a preverbal position before a clause and is related to a resumptive pronominal inside the clause (Al-Azzawi, 1990, Aoun and Benmamoun 1998, Soltan 2007, Al-Balushi 2011, 2012, among others). Al-Azzawi (1990), for example, analyzes all preverbal nominals in (80) below as left-dislocated nominals that are co-indexed with resumptive pronominals in argument positions. Example (80a) represents the case of subject left dislocation in which the fronted nominal is co-indexed with a null postverbal pronoun in the subject position. In examples (80b) and (80c), the left-dislocated nominals are co-indexed with postverbal clitics occurring in object and possessor positions, respectively.

- (80) a. al-ʔawlad-u_i nam-u_i
 the-boys-NOM slept-3.M.pl
 ‘As for the boys, they slept.’

- b. al-ʔawlad-u_i saʕad-na-hum_i
 ‘The boys-NOM helped-we-them
 ‘As for the boys, we helped them.’
- c. aliy-un_i jaʔ-at ʔumm-u-hu_i
 Ali-NOM came-3.sg.F mother-NOM-his_i
 ‘As for Ali, his mother came.’

The same approach is adopted cross-linguistically by Frascarelli (2007), who conducts a discourse study based on analyzing Italian spoken corpora. Frascarelli argues that preverbal nominals in Italian are Topics that occupy an A-bar position in the CP domain and proposes the existence of [+aboutness] feature, which functions as an extended EPP feature to account for preverbal Topics in Italian. Frascarelli points out that null subject *pro* and resumptive clitics are both interpreted by being co-indexed with Topics.

Another approach in analyzing examples of so-called object left-dislocation is to consider them instances of preverbal subjects, which is the approach that I adopt in this dissertation following Doron and Heycock (1999, and later works). Doron and Heycock analyze fronted nominals as (80b) and (80c) as broad subjects in comparison with the narrow subject inside the clause. Doron and Heycock argue that Standard Arabic and Hebrew can have broad subjects, exemplified in (81) below by *al-bait* ‘the house’ in Arabic and *Ruti* in Hebrew, in addition to narrow subjects exemplified by *alwaan-u-hu* ‘its colors’ and *yeS* ‘having/owning’. This approach of analyzing fronted objects as cases of preverbal subjects is adopted by Fassi Fehri (2005) and Musbahien (2008) as will be discussed in detail in Chapter 6.

- (81) a. **al-bait-u** alwaan-u-hu zaahiyat-un
 the-house-NOM color.pl-NOM-its bright-NOM
 ‘The house has bright colors. (lit= the house, its colors are bright)’
- b. **ruti** yeʃ la savlanut
 Ruti there-is to-her patience
 ‘Ruti has patience.’

[Doron and Heycock 1999: 70-71]

Preverbal subjects and left-dislocated phrases are not only syntactically but also pragmatically distinguished. Rizzi (2005) discusses the discourse interpretive similarities and differences between topics and subjects mainly as observed in Italian. Subjects and topics are both followed by predicates that are “about” them; “A subject shares with a topic the prominence related to the fact that the described event is presented as being about that argument (“aboutness”). An argument (which could be categorized as given information or not) is selected as the point of departure in the description of the event, which is described as being “about” that argument” (Rizzi, 2005: 211). Thus, subjects and topics are both characterized by involving the [+ aboutness] feature.

Despite such interpretive similarities, subjects and topics can still be distinguished. Topics only correspond to given information that is part of the background but cannot be used in a completely new context. On the contrary, preverbal subjects can express new and given information. “Preverbal subjects are fully felicitous when they express new information in out of the blue “*What happened?*” contexts, contexts in which a (Clitic Left-Dislocation) topic is not felicitous” (Rizzi 2005: 210). Because topics can only express given information and must be linked to discourse, topics are characterized by being Discourse-Linked (D-Linked). Preverbal subjects can provide new information and does not need to be linked to previous discourse, so subjects are characterized by lacking the Discourse-Linked feature. To differentiate between subjects and topics, subjects are characterized by [+ aboutness] while topics are [+ aboutness/ + D-linked]. “So, a topic involves aboutness and D-linking, while a subject involves pure aboutness” (Rizzi, 2005:212), as shown in (82). The characterization in (82) does not mean that subjects cannot be linked to discourse. Subjects can be linked or not linked to discourse whereas topics must be linked to discourse, according to Rizzi (2005).

(82) Top: [+ aboutness]
[+ D-linking]

Subj: [+ aboutness]

[Rizzi 2005:212]

In summary, preverbal subjects can get left-dislocated to Topic position above wh-phrase, but they can also stay in their A-position below wh-phrase, in the SubjP⁴². The categories of definite nominals, proper nouns, pronouns, definite nominals quantified with *kol* ‘all’ and *moʕzam* ‘most’ can all move from postverbal subject position in [Spec, vP] to preverbal subject position in [Spec, SubjP], passing through [Spec, TP] and [Spec, AspP] then, possibly, to [Spec, TopP]. However, indefinite nominals modified with adjectives and numerals and the bare negative quantifiers *wala-aHad* ‘anybody/nobody’ and *wala-fai* ‘anything/nothing’ can only move from postverbal position in [Spec, vP] to preverbal position in [Spec, SubjP], but they cannot move to [Spec, TopP] because these elements are not usually topicalized or left-dislocated. Finally, bare indefinite nominals, which represents the most restricted nominal category, can only appear in postverbal position in [Spec, vP] and cannot move to any preverbal subject positions.

4.5 Summary and conclusion

In this chapter, I considered the distribution of indefinite nominals in preverbal position and demonstrated that such nominals are required to be licensed via modification in order to occupy a preverbal position. Alternatively, indefinite nominals, which always encode existential interpretations, can be licensed preverbally by the existential particle *feeh*. I provided evidence that this existential particle functions as a verb basically since it is negated with verbal negation. I extended this analysis to possession particles and analyzed them also as verbs (that are originally Roots combined with the category-defining head *v* to head a vP instead of PP) and their object clitics as agreement inflections.

After accounting for the definiteness restriction relevant to preverbal positions, I introduced the two conflicting approaches in analyzing preverbal nominals in Arabic and cross-linguistic studies. Following Cardinaletti (1997, 2004), I proposed that preverbal subjects in Makkan Arabic occupy the specifier position of SubjP and are derived by a successive

⁴² Recall that there are also base-generated left-dislocated nominals in Arabic as discussed in Aoun and Benmamoun (1998). A discussion of these is out of the scope of this dissertation.

movement from [Spec, vP] leaving behind copies of the phi-features in the specifier positions of the projections they pass through, vP, AspP and TP, one of which can be phonologically realized (as proposed in Chapter 3). Finally, I argued that preverbal subjects and left-dislocated phrases occupy distinct syntactic positions based on the distribution of nominal categories in the two preverbal positions.

Chapter 5

Subjects in Copular Sentences

5.1 Introduction

In this chapter, I discuss three main structural aspects of copular sentences in Makkan Arabic; the derivation of copulas, the position of pre-copula subjects and the distinction between two types of pronominals that may appear in copular sentences. As an introduction to the chapter, I present the distribution of copulas in present versus non-present sentences. It is a well-known fact about Arabic that copular sentences employ copulas only in non-present tenses, which is why present tense copular constructions are sometimes referred to as verbless sentences or zero-copula sentences (Eid, 1991; Benmamoun, 2008; Aoun et al. 2010; Al-Balushi 2012; Ouhalla, 2013; Alharbi, 2017, among others). However, I argue in this chapter against this common assumption in two ways. First, I suggest that copulas in present tense sentences are only phonologically null but are structurally present. Second, I show that copulas can also be phonologically overt in the present tense to express non-deictic events such as wishes, conditions and habitual events. This overt use of copulas is not accounted for in the literature on Arabic.

A detailed analysis of copular predicates is significant in this dissertation for two reasons. First, copular sentences represent one type of predication that is discussed in this chapter, in addition to verbal predication (discussed in Chapter 3 and 4) and sentential predication (discussed in Chapter 6). Second, present tense copular sentences are challenging to the analysis that I propose in this dissertation for preverbal subjects. More specifically, I propose that preverbal subjects occupy the specifier position of SubjP to satisfy the SoP feature while the EPP feature is checked by verb movement from v to T. However, it has been consistently suggested in the literature that verbs in present tense copular sentences are structurally absent, and that the EPP feature is satisfied by obligatory overt subjects in the specifier of TP. Arguing that verbs in such sentences are only phonologically null but structurally present allows generalizing the analysis that the EPP feature in Makkan Arabic is satisfied by verb movement to T, and that

preverbal subjects undergo a successive movement to [Spec, SubjP] to satisfy the SoP feature. to this sentence type as well.

I adopt the Distributed Morphology framework to account for the phonological/morphological absence of copulas in Makkan Arabic. I argue that copula verbs are derived by combining category-neutral Roots with the category-defining head v_{COP} ⁴³. The copula verb then undergoes head movement to AspP, where it is specified as [$\pm$ PERF], and to TP, where it acquires phi-features and tense features. This verb movement is motivated ultimately to satisfy the EPP feature. In this chapter, I additionally employ the feature [deictic] (see Guéron 2007) which I assume to originate in the functional head Asp as will be explained in section 5.2.3. When the terminal node T is specified with the [present] and the [deictic] feature, the phonologically null exponent $\emptyset$ is inserted to spell out the copula. In this analysis, I differentiate between the structural presence or absence of copulas, on one hand, and between the phonologically null or overt copulas, on the other hand. I argue that in Arabic present tense sentences, copulas are always structurally present but can be phonologically null to mark deictic present tense.

Most previous analyses assume that copulas are structurally absent in present tense copular sentences and attribute the structural absence of copulas in such “verbless sentences” to a defect in the present tense features in Arabic. This assumed defect allows semantically empty verbs such as the copula to be either phonologically null (Fassi Fehri 1993) or structurally absent (Soltan 2007; Benmamoun 2008, Al-Balushi 2011). Such arguments lead many linguists to suggest that verbless sentences are small clauses that lack the main functional projections (Mouchaweh 1986, Rapoport 1987, Rothstein 1995, 2001). However, there are also linguists who explicitly argue against the small-clause perspective (e.g., Benmamoun, 2008; Aoun et al., 2010; Hazout, 2010). In this dissertation, I argue that copular sentences have the same underlying

⁴³ I assume that verbal heads come in various flavours which dictates the structure of vP and the generation of the external and internal arguments (Arad 1998; 2002; Alexiadou et al. 2006; McGinnis 2000; Van Gelderen 2014; Azhari, 2019). In that regard, verbs can be intransitive, transitive, di-transitive or copular, for example. When the verb is copular, it holds the predication relation between the nominal in the specifier position of vP and the non-verbal complement of v.

structure of non-copular sentences with verbal predicates, and that this underlying structure holds in present and non-present tenses. I thus depart from the common assumption that there are structural differences between present tense and non-present tense copular sentences (Soltan 2007, Benmamoun 2008, Aoun et al. 2010, Al-Balushi 2011, among others). Rather, I argue that the presence of the deictic feature on the head Asp causes copulas in the present tense to be phonologically null. In spelling out regular (non-copula) verbs, the deictic feature is realized as an aspectual prefix morpheme in Makkan Arabic as will be discussed in section 5.2.3. So, I suggest that the phonological absence of copulas in the deictic present tense is not correlated with differences in the present versus past tenses, but with the aspectual system in Arabic.

Turning to the subjects that appear before copula verbs in Arabic, I argue that they undergo a successive movement from their position in [Spec, vP] to the specifier position of a Subject of Predication Phrase (SubjP), going through [Spec, AspP] and [Spec, TP]. These movements result in the copying of the phi-features of the subjects in a chain of nodes. These features can be optionally spelled out as resumptive pronominals that follow pre-copula subjects. Optional resumptive pronominals are different from Prons that obligatorily appear in deictic present tense copular sentences when the predicate is a definite nominal. I argue in this chapter that subjects can be null pronouns in copular sentences which lack overt copulas, contrary to the common assumption in Arabic that subjects are obligatory in the absence of copulas (Benmamoun 2008, Aoun et al. 2010, among others). I demonstrate that null expletives are obligatory in Makkan Arabic before weather predicates (e.g. *it is cold today*) and before adjectives taking clausal complements (e.g. *it is impossible that I go*). Subjects can be optionally null when they are identified in the context (e.g. *(I am) very sick today and cannot leave the house*). I present below data from Makkan Arabic to describe the distribution of copulas in Makkan Arabic before laying out the analysis I propose for copular sentences.

In Makkan Arabic, and other Arabic dialects including Standard Arabic, copulas do not usually appear in present tense copular sentences. Thus, nominals are directly followed by non-

verbal predicates such as APs, NPs and PPs, as shown in (1).⁴⁴ Adjectival and nominal predicates agree with the subject in gender and number. Prepositional phrases do not agree with the subject.

- (1) a. al-ḥafl-a ḥelw-a
 the-party.sg-F beautiful-sg.f
 ‘The party (is) beautiful.’
- b. al-ḥafl-a xoraf-a
 the-party.sg-F legend-sg.f
 ‘The party (is) a legend (legendary).’
- c. al-ḥafl-a fi al-fondog
 the-party.sg-F in the-hotel.sg
 ‘The party (is) in the hotel.’

The examples in (2) shows that in contrast to present tense sentences, copulas appear in past and future sentences:

- (2) a. al-ḥafl-a kaanat ḥelw-a
 the-party.sg-F be.perf -3.sg.f beautiful-sg.f
 ‘The party was beautiful.’
- b. al-ḥafl-a kaanat xoraf-a
 the-party.sg-F be.perf -3.sg.f legend-sg.f
 ‘The party was a legend ‘legendary).’
- c. al-ḥafl-a kaanat fi al-fondog
 the-party.sg-F be.perf -3.sg.f in the-hotel.sg
 ‘The party was in the hotel.’
- (3) a. al-ḥafl-a ḥa-tekoon ḥelw-a
 the-party.sg-F will-be.imperf -3.sg.f beautiful-sg.f
 ‘The party will be beautiful.’

⁴⁴ Note that copulas can also appear with verbal predicates to form perfect tenses, for example, as in (i) below. The discussion in this chapter is exclusive to copulas before non-verbal predicates.

(i) al-bent kaanat ged raḥat laman atašalt
 the-girl.sg.f be.perf.3.sg.f already go.perf.3.sg.f when call.perf.1.sg
 ‘The girl had already left when I called.’

- b. al-ḥafl-a ḥa-tekoon xoraf-a
 the-party.sg-F will-be.imperf -3.sg.f legend-sg.f
 ‘The party will be a legend ‘legendary).’
- c. al-ḥafl-a ḥa-tekoon fi al-fondog
 the-party.sg-F will-be.imperf -3.sg.f in the-hotel.sg
 ‘The party will be in the hotel.’

The negation particle that appears in present tense copular sentences is different from the one that appears in their non-present counterparts. In present tense copular sentences, the non-verbal negation particle *mu* or the inflected negation particle *ma-hi* is used. In non-present copular sentences, the verbal negation particle *ma* is used.

- (4) a. al-ḥafl-a mu/ma-hi ḥelw-a
 the-party.sg-F NEG/NEG-3.sg.f beautiful-sg.f
 ‘The party is not beautiful.’
- b. al-ḥafl-a mu/ma-hi xoraf-a
 the-party.sg-F NEG/NEG-3.sg.f legend-sg.f
 ‘The party is not a legend ‘legendary).’
- c. al-ḥafl-a mu/ma-hi fi al-fondog
 the-party.sg-F NEG/NEG-3.sg.f in the-hotel.sg
 ‘The party is not in the hotel.’
- (5) a. al-ḥafl-a ma kaanat ḥelw-a
 the-party.sg-F NEG be.perf-3.sg.f beautiful-sg.f
 ‘The party was not beautiful.’
- b. al-ḥafl-a ma kaanat xoraf-a
 the-party.sg-F NEG be.perf -3.sg.f legend-sg.f
 ‘The party was not a legend ‘legendary).’
- c. al-ḥafl-a ma kaanat fi al-fondog
 the-party.sg-F NEG be.perf -3.sg.f in the-hotel.sg
 ‘The party was not in the hotel.’

The structure of non-present copular sentences, in which the past or future form of the verb *KWN* ‘to be’ is employed, resembles the structure of sentences with verbal predicates regarding the

position where subjects can appear. In both structures, the sentence can appear with subjects before verbs (6) or after verbs (7), or without an overt subject (8).

- (6) a. al-ḥafl-a **kaanat** ḥelw-a
 the-party.sg-F be.perf-3.sg.f beautiful-sg.f
 ‘The party was beautiful.’
- b. al-ḥafl-a **ʕajabat-ni**
 the-party.sg-F please.perf.3.sg.f-1.sg
 ‘The party pleased me.’
- (7) a. **kaanat** al-ḥafl-a ḥelw-a
 be.perf-3.sg.f the-party.sg-F beautiful-sg.f
 ‘The party was beautiful.’
- b. **ʕajabat-ni** al-ḥafl-a
 please.perf.3.sg.f-1.sg the-party.sg-F
 ‘The party pleased me.’
- (8) a. **kaanat** **ḥelw-a**
 be.perf-3.sg.f beautiful-sg.f
 ‘It was beautiful.’
- b. **ʕajabat-ni**
 please.perf.3.sg.f-1.sg
 ‘It pleased me.’

Since present-tense copular sentences lack the copula verb, subjects seem to appear in a fixed position, and it is proposed that subjects are obligatory in this sentence type (Eid, 1991; Benmamoun, 2008; Aoun et al. 2010; Al-Balushi 2012; Ouhalla, 2013, among others). The similarities between non-present tense copular sentences and sentences with verbal predicates regarding the position of subjects and type of negation particles, on one hand and the observed differences between these two sentence types and present-tense copular sentences have led some to argue that present copular sentences have a unique structure that is different from all other sentence types in Arabic (Soltan 2007; Benmamoun 2008; Aoun et al. 2010; Al-Balushi 2012; Ouhalla 2013, among others).

This chapter is organized as follows. In section 5.2, I discuss copulas in the present tense sentences in Makkan Arabic. In section 5.2.1, I present the common assumptions that such sentences structurally lack copulas, and in section 5.2.2, I argue that copulas can be overt in

present tense copular sentences to express non-deictic events such as expressing wishes, conditional and habitual events. In section 5.2.3, I propose an analysis for the lack of copulas in such constructions based on the DM framework, and in section 5.2.4, I specifically account for the distinctive properties of present-tense copular sentences regarding the use of negation and modals. In section 5.3, I suggest that subjects in copular sentences are derived by successive movements to the specifier of SubjP, and I also discuss the issue of null subjects in copular sentences (both with null and overt copulas). In section 5.4, I distinguish between the resumptive pronominals that result from subject movement and Prons that appear only in equational deictic present tense copular sentences. I conclude the chapter in section 5.5 by summarizing the main points covered in the chapter.

5.2 Copulas in present tense copular sentences

In this section, I show that copulas in the present tense can be phonologically present or absent. With respect to the so-called verbless sentences in which copulas are absent in the present tense, I argue that copulas can be overt in the present tense to syntactically signal the semantic differences of deictic versus non-deictic events. I account for the structure of present-tense copular sentences in terms of the DM approach and also address how they interact with negation particles.

5.2.1 Verbless sentences

Analyzing the structure of present tense copular sentences, or verbless sentences, has attracted the attention of Arab linguists for decades. Bakir (1980) introduces the null copula approach to account for the phonological absence of copulas in the present tense. This approach is embraced by Fassi Fehri (1993) who argues that copulas in so-called verbless sentences in Standard Arabic are only phonologically null but are structurally present. The phonological absence of null copulas in such constructions is argued to be related to the specifications of the present tense. Fassi Fehri describes Arabic present tense as unmarked and not requiring a copula verb to bear

the tense specification. According to this perspective, verbless sentences (in the present tense) and copular sentences (in non-present tenses) do not have the same underlying structure.

In this chapter, I adhere to the perspectives of the null copula approach, suggested by Bakir (1980) and Fassi Fehri (1993) that copulas in the present tense are phonologically null but structurally present. I provide further evidence to show that copulas can also be phonologically present in such constructions. However, I depart from Fassi Fehri's analysis in which the phonological absence of copulas in the present tense is associated with different specifications of the present versus past tenses. Rather, I associate phonologically overt and null copulas with the presence or absence of the deictic feature on the head Asp and propose that copula verbs in the deictic present tense are realized as a null element.

The null-copula approach is challenged by Arab linguists who argue that Arabic present tense copular sentences structurally lack any verbal projection (Soltan 2007; Benmamoun 2008, Aoun, Benmamoun and Choueiri 2010, Al-Balushi 2011, 2012, among others). These linguists assume that the structural absence of copulas in the present tense is related to structural differences between the present and the past tenses.⁴⁵ It is suggested that T in present tense sentences in Arabic lacks some functional features or is “defective” in Al-Balushi's term, which prevents verb movement to T to check these features (Fassi Fehri 1981, 1993, Benmamoun 2000, 2008, Soltan 2007, Aoun, Benmamoun and Choueiri 2010). Soltan (2007) suggests that the head T in present tense copular sentences does not have any phi-features, and thus there is no need for a verbal host. The absence of a verbal host means that verbs do not move to T in the present tense, and that only SVO sentences are allowed in the present tense. Benmamoun (2008) similarly proposes that the present tense in Arabic is only specified for the nominal feature [+D], which gets checked by the subject while the past tense is specified for both, the nominal feature [+D] and the verbal feature [+V]. Since the present tense is not specified for verbal features, it does not need a copula which accounts for the reason why present tense copula sentences lack verbs.

⁴⁵ Note that Fassi Fehri (1993) who argues for a null copula in present tense copular sentences and Soltan (2007) and Benmamoun (2008, 2010) who argue for the complete absence of the copula in such structures all share the same assumptions regarding the specification of present versus past tenses in Arabic.

Although Soltan (2007) and Benmamoun (2008) present different analyses of present tense copular sentences, they both assume that verbs raise from v to T only in past-tense sentences to check the EPP feature. In present tense sentences, verbs do not move to T. Instead, subjects move from [Spec, vP] to [Spec, TP] to check the EPP feature. However, this assumption that verb movement to T takes place only in non-present sentences makes wrong predictions about word order in present versus past tenses in sentences with verbal predicates. It predicts that VSO order is only allowed in past-tense sentences, and that SVO order is only allowed in present tense sentences. These implications are not accurate. Both SVO and VSO order are allowed in present tense and past-tense sentences as shown in (9) and (10).

(9) a. raḥ-at al-bent al-ḥafl-a
 went-3.sg.f the-girl.sg the-party-sg.f
 ‘The girl attended the party.’

 b. al-bent raḥ-at al-ḥafl-a
 the-girl.sg went-3.sg.f the-party-sg.f
 ‘The girl attended the party.’

(10) a. te-rooḥ al-bent al-ḥafl-a
 3.f-go.sg the-girl.sg the-party-sg.f
 ‘The girl attends the party.’

 b. al-bent te-rooḥ al-ḥafl-a
 the-girl.sg 3.f-go.sg the-party-sg.f
 ‘The girl attends the party.’

Also, the assumption that the present tense lacks categorial features and thus does not require a verbal host in copular sentences does not account for the presence of copulas in conditional or habitual present tense copular sentences (11) (I discuss this case in detail in section 5.2.2 below).

(11) a. al-sama zarga daḥeen
 the-sky-sg.f blue.sg.f now
 ‘The sky (is) blue now.’

 b. al-sama te-koon zarga fi al-ṣeef
 the-sky-sg.f 3.f-be.imperf.sg blue.sg.f in the-summer
 ‘The sky is blue in summer.’

Fassi Fehri's (1993), Soltan's (2007) and Benmamoun's (2008) assumptions regarding the structural differences between present and past tenses, which underlie their analysis of the absent copulas in present tense copular sentences, are not without problems as discussed above. They make wrong predictions about word order in present and past tenses and ignore the presence of copulas in conditional and habitual present tense. Al-Balushi (2012) also argues in favor of the structural absence of a verbal projection in present tense copular sentences, but the analysis that he proposes is incompatible with the assumptions of this dissertation. Al-Balushi argues against Chomsky's (2001, 2005) Agree model and proposes that Case is not relevant to, nor valued through, agreement. Additionally, Al-Balushi's argument is based on data from Standard Arabic, which cannot be generalized to Arabic dialects because of the structural differences between Standard Arabic and modern Arabic dialects.

The assumed absence of verbal projections in verbless sentences leads many researchers to categorize these sentences as reduced small clauses (Mouchaweh 1986, Rapoport 1987, Rothstein 1995, 2001). Small clauses (SCs) are usually embedded under consider-type verbs as in *I consider Mary smart*, where *Mary smart* is analyzed as an embedded small clause that lacks verbal and tense projections. In response, many studies provide various types of evidence for the existence of a TP projection in verbless sentences. By comparing infinitival small clauses with verbless sentences in Hebrew and Arabic, Hazout (2010) argues that present tense verbless sentences have the clause structure of full clauses. Benmamoun (2008) and Aoun et al. (2010) similarly argue for TP and CP projections in verbless sentences based on the comparison between verbless sentences and their non-present tense copular counterparts. According to these studies, the obligatory presence of the external argument, and the partial agreement in number and gender between the subject and the following nominal or adjectival predicates, all signal the presence of a functional projection where the EPP and agreement features are checked.⁴⁶ Another suggested indication for the existence of TPs in verbless sentences is the usage of pronominal clitics, or 'Prons' in Doron's (1986) terms, between the nominals and their predicates in Arabic and Hebrew (I discuss Prons in details in section 5.4 below).

⁴⁶ Verbs in Arabic fully agree with their subjects in number, person and gender. Predicative adjectives and nominals only partially agree with their subjects in number and gender, but not in person.

I follow Benmamoun (2008), Aoun et al. (2010) and Hazout (2010) in treating the so-called verbless sentences as full clauses that include CP and TP projections. However, I depart from their analysis (and of Fassi Fehri 1993 and Soltan 2007) that copular sentences in all tenses have the same underlying structure, as I discuss in the following section. I show that copulas can be overt in the present tense and propose that the morphological realization of the copulas in present tense sentences is associated with the set of features that cluster on the head T.

5.2.2 Overt copulas in the present tense

In this section, I show that copulas can be phonologically overt in present tense copular sentences which goes against the common assumption that present tense copular sentences in Arabic always lack copulas (Eid, 1991; Soltan, 2007; Benmamoun, 2008; Hazout, 2010; Al-Balushi, 2011, 2012; Choueiri, 2016; Alharbi, 2017). I argue that the imperfective form of the copula can be overt in present tense sentences that encode non-deictic (e.g., conditional or habitual) events. Copulas are phonologically overt after the modal verb *lazem* ‘should’ (12a), the future clitic *Ha* ‘will’ (12b) and after the verb *atmna* ‘I wish’ in embedded clauses (12c). In addition, copulas can be overt to encode the habitual aspect of the verb (12d) that does not necessarily express the reality at the moment of speech.

- (12) a. al-ḥafl-a **lazem** **te-koon** ḥelw-a
 the-party.sg-F should be.imperf.3.sg.f beautiful-sg.f
 ‘The party should be beautiful.’
- b. al-ḥafl-a ḥa-**te-koon** badri
 the-party.sg-F will-be.imperf.3.sg.f early
 ‘The party will be early.’
- c. **atmna** al-ḥafl-a **te-koon** xoraf-a
 wish.1.sg the-party.sg-F be.imperf.3.sg.f legend-sg.f
 ‘I wish the party is a legend (legendary).’
- d. al-ḥafl-a **ʕadatan** **te-koon** fi al-fondog
 the-party.sg-F usually be.imperf.3.sg.f in the-hotel.sg
 ‘The party is usually in the hotel.’

The absence of overt copulas encodes only situations that hold at the moment of speech and expand over an interval of time. Present tense copular sentences appear without overt copulas to describe a temporary situation in the present (13a). If the copula is present as in (13b), it is understood that the encoded situation does not take place at the moment, which I refer to as non-deictic.

- (13) a. al-sama zarga
 the-sky.sg.f blue
 ‘The sky is blue.’
- b. al-sama te-koon zarg-a (fi al-şayf)
 the-sky.sg.f 3.f.sg-be.imperf blue-sg.f (in the-summer.sg)
 ‘The sky is blue (in summer).’

In questions about time using the question word *meta* ‘when’, copular sentences always have their copulas overt (14), which implies that such questions about time are non-deictic. However, in questions headed by the question word *esh* ‘what’, for example, the copula can be phonologically null to question a situation that holds at the present moment (deictic interpretation), or overt to question a habitual situation in the present (non-deictic interpretation), as shown in (15).

- (14) a. meta tekoon al-sama zarga
 when 3.f.sg-be.imperf the-sky.sg.f blue-sg.f
 ‘When is the sky blue?’
- b. *meta al-sama zarga
 when the-sky.sg.f blue-sg.f
- (15) a. leef al-sama zarag
 why the-sky.sg.f blue-sg.f
 ‘Why is the sky blue (now)?’
- b. leef tekoon al-sama zarga
 why 3.f.sg-be.imperf the-sky.sg.f blue-sg.f
 ‘Why is the sky blue (usually)?’

In the following examples, I compare the main verb *leʕeb* ‘played’ with the auxiliary verb *kaan* ‘was’ in the present and past tenses. In the past tense, both verbs appear in the perfective verb form (16). To encode the habitual/stative events, the imperfective forms of the main verb *leʕeb* ‘played’ and the copula verb is employed as shown in (17).

- (16) a. al-bent **leʕb-at** fi al-ħadeega ams
 the-girl.sg.f play.perf-3.sg.f in the-garden-sg.f yesterday
 ‘The girl played in the garden yesterday.’
- b. al-bent **kaan-at** fi al-ħadeega ams
 daughter.sg.f be-3.sg.f in the-garden-sg.f yesterday
 ‘The girl was in the garden yesterday.’
- (17) a. al-bent **ʕadatan** **te-lʕab** fi al-ħadeega
 the-girl.sg.f usually 3.sg.f-play.imperf in the-garden-sg.f
 ‘The girl usually plays in the garden.’
- b. al-bent **ʕadatan** **te-koon** fi al-ħadeega
 the-girl.sg.f usually 3.sg.f-be.imperf in the-garden-sg.f
 ‘The girl is usually in the garden.’

One diagnostic test of the use of the deictic present tense is the compatibility with the adverb *daheen* ‘now’. While the presence of the adverb *daheen* ‘now’ is correlated with the morpheme *bi-* on main verbs (18), such a morpheme is ungrammatical when attached to the copula verb. Instead, the copula verb itself is absent. Thus, the absence of the copula encodes the same aspectual feature as the morpheme *bi-* on main verbs. To encode deictic present tense, the imperfective form of the main verb appears with the prefix *bi-* (18a). This prefix cannot be attached to the copula (18b), and instead the copula in the deictic present tense appears as a null element (18c).

- (18) a. al-bent **bi-te-lʕab** fi al-ħadeega **daheen**
 the-girl.sg.f 3.sg.f-play.imperf in the-garden-sg.f now
 ‘The girl is playing in the garden now.’
- b. *al-bent ***bi-te-koon/Ø** fi al-ħadeega daheen
 girl.sg.f be-3.sg.f in the-garden-sg.f now
 ‘The girl is in the garden now.’

- c. al-bent fi al-ḥadeega daheen
 girl.sg.f in the-garden-sg.f now
 ‘The girl is in the garden now.’

In the following section 5.2.3, I present the analysis that I propose for copular sentences in Makkan Arabic within the Distributed Morphology approach.

5.2.3 Copulas within the DM theory

As illustrated earlier, copular sentences in non-present tenses always have overt copulas. More specifically, the perfective form of the copula appears in past tense sentences (19a) while the imperfective form of the copula appears in future tense sentences preceded by a future prefix (19b). Although the copula is absent in present tense sentences (19c), the imperfective form of the copula can be overt when the present tense is non-deictic (19d), such as in wishes, conditional and habitual events.

- (19) a. al-ḥafl-a **kaan-at** ḥelw-a
 the-party.sg-F be.perf-3.sg.f beautiful-sg.f
 ‘The party was beautiful.’
- b. al-ḥafl-a **ha-tekoon** ḥelw-a
 the-party.sg-F will-be.imperf-3.sg.f beautiful-sg.f
 ‘The party will be beautiful.’
- c. al-ḥafl-a ḥelw-a
 the-party.sg-F beautiful-sg.f
 ‘The party (is) beautiful.’
- d. atmna al-ḥafl-a **te-koon** ḥelw-a
 hope.1.sg the-party.sg-F be.imperf.3.sg.f beautiful-sg.f
 ‘I hope the party is beautiful.’

In Table 12 below, I give the various inflectional forms of the perfective and imperfective copular verbs. They are similar to the inflections of regular verbs (see Chapter 1 for more details on the perfective and imperfective forms).

	Number	First Person	Second Person		Third Person	
Perfective	Singular	kunt	kunt (M)	kunti (F)	kaan (M)	kaanat (F)
	Plural	kunna	kunntu		kaanu	
Imperfective	Singular	akun	tekun (M)	tekuni (F)	yekun	tekun
	Plural	nekun	tekunu		yekunu	

Table 12: The perfective and imperfective forms of the copula verb *KWN* in Makkan Arabic

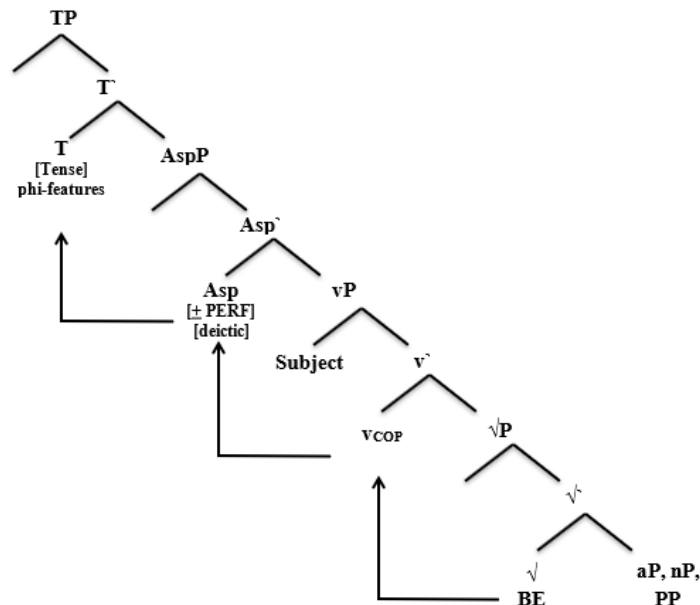
I associate the presence of a null copula with the presence of a deictic feature on the Aspect head drawing on Guéron's (2007) theory of Tense and Aspect. Guéron proposes that while Tense morphemes denote points in time, Aspect morphemes denote intervals of time. The functional nodes that contain these Tense and Aspect morphemes constitute a Tense-chain. The Tense-chain places the situation described by the sentence on the Time axis, and these nodes correspond to various types of Time (e.g. Speech Time, Reference Time). "The T-chain is the functional skeleton of the sentence. It is made up of the universal nodes Complementizer (Comp), associated with the Speech or Reference time; Tense (T), associated with the Assertion time; additional functional nodes which interact with Tense, such as Mood, Modality and Negation; and *v* + *V*, the functional and lexical heads of the Verb Phrase, respectively" (p. 369).

According to Guéron's theory, while the head of TP encodes the temporal extension (e.g., present or past), the head of the lexical projection (*V*) encodes the spatial extension in which the event is construed. For instance, the spatial domain of the verb *run* involves iterative movement of legs. The functional head *v* links the lexical projection (the spatial domain) and the Tense projection (the temporal domain). "The lexical head *V* merges with the functional head *v* to denote a situation, state or event. When *V* + *v* raises to *T* in Syntax or in Logical Form, the event or state *vP* denotes is predicated of the point of Assertion time associated with *T*. In deictic time, an aspect morpheme merged with *T* multiplies these points, deriving a linear array of points of time or interval" (p. 370).

Guéron's proposal on the functional nodes that make up the Tense-chain is in-line with my assumptions on the functional projections that are involved in the clause structure (e.g., CP,

TP, AspP and vP). In my assumptions, however, I assume that the lexical projection involves a category-neutral Root, instead of the lexical head V. Based on Guéron's theory of time, Aspect is a functional head that operates on the head T to pluralize it and transforms points in time into intervals in time. In that sense, the deictic present tense can only encode a temporary event, as in *I am reading now*, with the effect of the Aspect head. The Tense morpheme by itself does not suffice to express time intervals, otherwise an English sentence as *I read now* would be grammatical. On the contrary, habitual or state events, unlike deictic events, lack the aspect morpheme since they are expressed as points in time. According to Guéron's perspective, Aspect is as necessary as Tense to place an event in deictic time. Thus, I propose to place the [deictic] feature on the head Asp which encodes the deictic temporary events, opposed to habitual stative events that lack such a feature.

Recall that according to DM, the terminal nodes are composed of syntactic and semantic features. Phonological features are supplied by Vocabulary Insertion during spell-out at the PF stage. (See Chapter 2 for details on the DM theory and on my assumptions on word formation in Makkan Arabic). Copulas originate as category-neutral Roots in the Root Phrase $\sqrt{P}$ that is combined with the verbalizing head v_{COP} which dictates the predication relation between the subjects and their predicates. For spell-out to take place, copulas move to the head of the Aspect Phrase that bears the feature $[\pm \text{ PERF}]$ and the templatic pattern to spell out the verb. The head Asp may also bear a specification for the deictic feature, [deictic]. Copulas move further to T which bears the tense feature as well as specifications for phi-features. Head movement, as shown in (20), from $\sqrt{P}$, to vP, then to AspP and finally to TP clusters the features on the head T. This results in a terminal node T that is fully specified for a tense feature, Aspect features $[\pm \text{ PERF}]$, phi-features and in some cases, the feature [deictic].



In past tense sentences, the Vocabulary Items or phonological exponents, shown in (21), compete to be inserted in the terminal node T. The most specified exponent that matches the fully specified terminal node T wins the competition and gets inserted into the terminal node. Note that the Vocabulary Items are underspecified in the sense that they are specified for fewer features than may appear on the terminal nodes. Note also that the past tense selects perfective forms of verbs, which is why the tense features are not included in the Vocabulary Items but only on the terminal node.⁴⁷

- (21)
- | | |
|-----------------------------------|----------|
| a. [+ PERF, 1 singular] | ↔ kunt |
| b. [+ PERF, 1 plural] | ↔ kunna |
| c. [+ PERF, 2 singular masculine] | ↔ kunt |
| d. [+ PERF, 2 singular feminine] | ↔ kunti |
| e. [+ PERF, 2 plural] | ↔ kuntu |
| f. [+ PERF, 3 singular masculine] | ↔ kaan |
| g. [+ PERF, 3 singular feminine] | ↔ kaanat |
| e. [+ PERF, 3 plural] | ↔ kaanu |

⁴⁷ Tense is not morphologically realized in Arabic, so the past and the present features are parts of the feature bundles on the terminal node, but they are not included in the Vocabulary Items (for more details, refer to section 2.6.3 in Chapter 2 on Tense and Aspect in Arabic).

However, the imperfective forms of the copula are not always phonologically overt in present tense copular sentences in Arabic. The presence or absence of copulas in the present tense marks aspectual differences between the two constructions. More specifically, the phonological absence of the copula is the realization of the deictic aspectual morpheme in present tense copular sentences. The grammatical environment in the Vocabulary Items of the imperfective forms of the null copula includes an additional feature [deictic] in their syntactic environments. In non-deictic present tense where the imperfective form of the copula is overt, the phonological exponents in (22) compete to be inserted in the terminal node T. The most specified exponent wins the competition. When terminal nodes are specified as [- PERF, deictic] among other features, the null exponent $\emptyset$ is realized during spell-out (22i).

- | | | |
|------|-----------------------------------|---------------|
| (22) | a. [- PERF, 1 singular] | ↔ akun |
| | b. [- PERF, 1 plural] | ↔ nekun |
| | c. [- PERF, 2 singular masculine] | ↔ tekun |
| | d. [- PERF, 2 singular feminine] | ↔ tekuni |
| | e. [- PERF, 2 plural] | ↔ tekunu |
| | f. [- PERF, 3 singular masculine] | ↔ yekun |
| | g. [- PERF, 3 singular feminine] | ↔ tekun |
| | h. [- PERF, 3 plural] | ↔ yekunu |
| | i. [- PERF, deictic] | ↔ $\emptyset$ |

According to this account, copulas, and all other traditional lexical categories, are broken down into a set of syntactic, phonological and semantic features. I argue that the features that underlie copulas in the present, past or future tenses are always available at the terminal node T, so they are structurally available. The only difference is in the phonological realization of these features. In the case of deictic present tense, the feature bundle on the head T is realized by a null exponent. These views contrast with the common assumption in the literature that there are structural differences between present tense and non-present tense copular sentences in Arabic and Hebrew (Eid, 1991; Soltan, 2007; Benmamoun, 2008; Hazout, 2010; Al-Balushi, 2011, 2012; Choueiri, 2016; Alharbi, 2017, among others). In the analysis that I propose, copular sentences in all tenses involve a TP, and the only difference is in the realization of the features as overt copulas or null exponents.

5.2.4 Verbal negation and modals in copular sentences

There is one more point which distinguishes the structure of present versus non-present copular sentences, and which I need to account for in the analysis that I propose for sentence types in Makkan Arabic. In non-present copular sentences, the verbal negation particle *ma* and also modal verbs such as *laazim* ‘must’ can appear in such structures. In present-tense copular sentences, by contrast, only the non-verbal negation particle *mu* or the inflected negation particle is used, and modals are ungrammatical in such structures.

Benmamoun (2008) and Aoun et al. (2010) employ the incompatibility of modals and the verbal negation particle with the so-called verbless sentences to argue that such sentences structurally lack copulas. As indicated in section 5.2.1 above, Benmamoun and Aoun et al. associate the structural absence of copulas with the categorical features that are present on T in the present and past tenses in Arabic. More specifically, the present tense in Arabic is only specified for the nominal feature [+D], which gets checked by the subject while the past tense is specified for both, the nominal feature [+D] and the verbal feature [+V]. Since the present tense is not specified for verbal features, it does not require a copula verb which accounts for the reason why present tense copula sentences lack verbs.

Benmamoun and Aoun et al. argue against the presence of verbal projections in present tense copular sentences based on two pieces of evidence. The first piece of evidence comes from interaction of these constructions with negation in Moroccan Arabic. While past-tense copular sentences with overt copulas can have the negated copula before and after the subject, negation in present tense copula sentences can only appear after the subject. “If there is a null copula, it is not clear why it could not merge with negation and move past the subject on a par with overt verbal copula” (Benmamoun, 2008: 112). Note that in Moroccan Arabic, there are two negation affixes, the prefix *ma-* and suffix *-/*. Benmamoun assumes that with non-verbal predicates, no elements move to the negation projection, which is why these particles appear as a single negating element that precedes non-verbal predicates. In Makkan Arabic, there is only negation suffixes, so there is no reason to assume that the non-verbal negation particles are derived by having the suffix and prefix merged together.

- (23) a. ζ umar ma-kan-f μ u ζ allim
 NEG-be.perf.3.sg.m-NEG Omar teacher.sg.m
 ‘Omar was not a teacher.’
- b. ζ umar ma-kan-f μ u ζ allim
 Omar NEG-be.perf.3.sg.m-NEG teacher.sg.m
 ‘Omar was not a teacher.’
- c. ζ umar ma-f $\bar{i}$ μ u ζ allim
 Omar NEG-NEG teacher.sg.m
 ‘Omar is not a teacher.’
- d. *ma-f $\bar{i}$ ζ umar μ u ζ allim
 NEG-NEG Omar teacher.sg.m

[Aoun, Benmamoun and Choueiri 2010: 44]

The second piece of evidence that Benmamoun and Aoun et al. employ is that modals are ungrammatical in verbless sentences which indicates that there is no verbal projection that modals can select as a complement. To make the sentence grammatical, the imperfective form of the copula is inserted after the modal.

- | | | | | |
|--------|---------------------------|-------|----------------|--------------|
| (24)a. | *omar | lazem | muʃallim | |
| | Omar | must | teacher.sg.m | |
| b. | omar | lazem | y-kun | muʃallim |
| | Omar | must | 3.m-be.perf.sg | teacher.sg.m |
| | 'Omar must be a teacher.' | | | |

[Aoun, Benmamoun and Choueiri 2010: 39-40]

Benmamoun and Aoun et al. argue that copulas are structurally absent in (23c), and that in the presence of modals and verbal negation, copulas are inserted. I argue in this section that copulas are structurally present in the so-called verbless sentences and that the presence of modals and verbal negation both motivate copulas to be phonologically overt.

There is another point that must be considered in this regard. In the presence of overt copulas, there are two options for negation elements: The verb *kaan* can be preceded with the negation particle *ma* (25a), or the non-verbal predicates (e.g., APs, DPs and PPs) can be preceded by the non-verbal negation *mu* or the inflected negation (25b). In the absence of copulas, there is

only one option for negation, which is the non-verbal negation particle or inflected negation preceding the non-verbal predicates (25c).

- (25) a. al-ḥafla **ma** kaan-at ḥelw-a
 the-party.sg.f NEG be.perf-3.sg.f beautiful-sg.f
 ‘The party was not beautiful.’
- b. al-ḥafla kanat **mu/ma-hi** ḥelw-a
 the-party.sg.f be.perf-3.sg.f NEG/NEG-3.sg.f beautiful-sg.f
 ‘The party was not beautiful.’
- c. al-ḥafla **mu/ma-hi** ḥelw-a
 the-party.sg.f NEG/NEG-3.sg.f beautiful-sg.f
 ‘The party (is) not beautiful.’
- d. *al-ḥafla ma ḥelw-a
 the-party.sg.f NEG beautiful-sg.f
 ‘The party (is) not beautiful.’

The main observation regarding the distribution of the negation particles *ma* and *mu* is that they are morphological alternatives of each other, and that they have different selectional properties. The negation particle *mu* is a free morpheme that appears before non-verbal constituents, such as APs, PPs and DPs. By contrast, the negation particle *ma* is a dependent prefix morpheme that requires an overt host, and that host must either be a verb or a pronominal copy of the subject. Where *ma-* is not possible, it could be because the verb is absent or because the verb is present but null. As such the absence of *ma-* cannot be used as evidence that the copula is not part of the syntactic structure.

In addition to negation, modals show variation in co-occurring with phonologically overt versus null copulas (26). I suggest that modals motivate the phonological spell out of copulas because modals create a non-deictic semantic environment that is morphologically marked by overt copulas. Recall that in the analysis that I propose in section 5.2.2, deictic present tense in copular sentences is marked by a phonologically null copula. One piece of evidence in support of this view comes from Egyptian Arabic which has developed a deictic modal construction in which a modal occurs with a null copula (26c). This shows that modals are not inherently incompatible with null copulas.

- (26) a. al-ḥafla ḥelw-a (Makkan/Egyptian Arabic)
 the-party.sg.f beautiful-sg.f
 ‘The party (is) beautiful.’
- b. al-ḥafla lazem *(te-koon) ḥelw-a (Makkan Arabic)
 the-party.sg.f must 3.f-be.imperf.sg beautiful-sg.f
 ‘The party must be beautiful.’ (The party should be beautiful in the future)
- c. al-ḥafla lazem ḥelw-a (Egyptian Arabic)
 the-party.sg.f must beautiful-sg.f
 ‘The party must be beautiful.’ (The party seems to be beautiful)

In the next section, I discuss the case of null subjects in copular sentences, which provides further evidence that the EPP feature in Arabic is not satisfied by the presence of an overt subject in the specifier of TP.

5.3 Pre-copula subjects in copular sentences

In the previous section, I suggested that copulas are derived by combining the Root BE with the v_{COP} head, which is a verbal head with a copula flavor, to create a predication relation between nominals in [Spec, vP] and the complement of v_{COP} . In Arabic, copulas move from v_{COP} to Asp and then to T, and these functional heads also provide copulas with the templatic patterns necessary for spell-out.

In this section, I first address word order in copular sentences with overt copulas and overt subjects and discuss the definiteness constraint on preverbal/pre-copula nominals. I also present the analysis that I propose for overt subjects in copular sentences as I argue that pre-copula subjects (before null or overt copulas) undergo a successive movement from [Spec, vP], to [Spec, SubjP] going through [Spec, AspP] and [Spec, TP]. In section 5.3.2, I discuss obligatory null expletives in deictic present tense copular sentences (which have null copulas as well). These sentences, which lack overt subjects and overt copulas, support the assumption that the EPP feature is not satisfied by nominals in the specifier of TP nor by overt verb movement to T. In other words, phonological realization of verbs is not necessary to satisfy EPP.

5.3.1 Overt subjects

In copular sentences with overt copulas, subjects can appear either after the copula yielding a VSO sentence as in (27) or before the copula yielding a sentence in SVO word order (28). In the absence of overt copulas (29), subjects always appear before their non-verbal predicates (e.g., adjectival, nominal and prepositional phrases).⁴⁸

- (27) a. **kaan-at** al-ḥafl-a ḥelw-a (Past Tense)
 be.perf-3.sg.f the-party.sg-F beautiful-sg.f
 ‘The party was beautiful.’
- b. **ha-tekoon** al-ḥafl-a ḥelw-a (Future Tense)
 will-be.imperf-3.sg.f the-party.sg-F beautiful-sg.f
 ‘The party will be beautiful.’
- c. atmna **tekoon** al-ḥafl-a ḥelw-a (Non-deictic Present Tense)
 1.sg.wish.imperf be.imperf-3.sg.f the-party.sg-F beautiful-sg.f
 ‘I wish the party is beautiful.’
- (28) a. al-ḥafl-a **kaan-at** ḥelw-a (Past Tense)
 the-party.sg-F be.perf-3.sg.f beautiful-sg.f
 ‘The party was beautiful.’
- b. al-ḥafl-a **ha-tekoon** ḥelw-a (Future Tense)
 the-party.sg-F will-be.imperf-3.sg.f beautiful-sg.f
 ‘The party will be beautiful.’
- c. atmna al-ḥafl-a **tekoon** ḥelw-a (Non-deictic Present Tense)
 1.sg.wish.imperf the-party.sg-F be.imperf-3.sg.f beautiful-sg.f
 ‘I wish the party is beautiful.’
- (29) a. al-ḥafl-a ḥelw-a (Deictic Present Tense)
 the-party.sg-F beautiful-sg.f
 ‘The party is beautiful.’

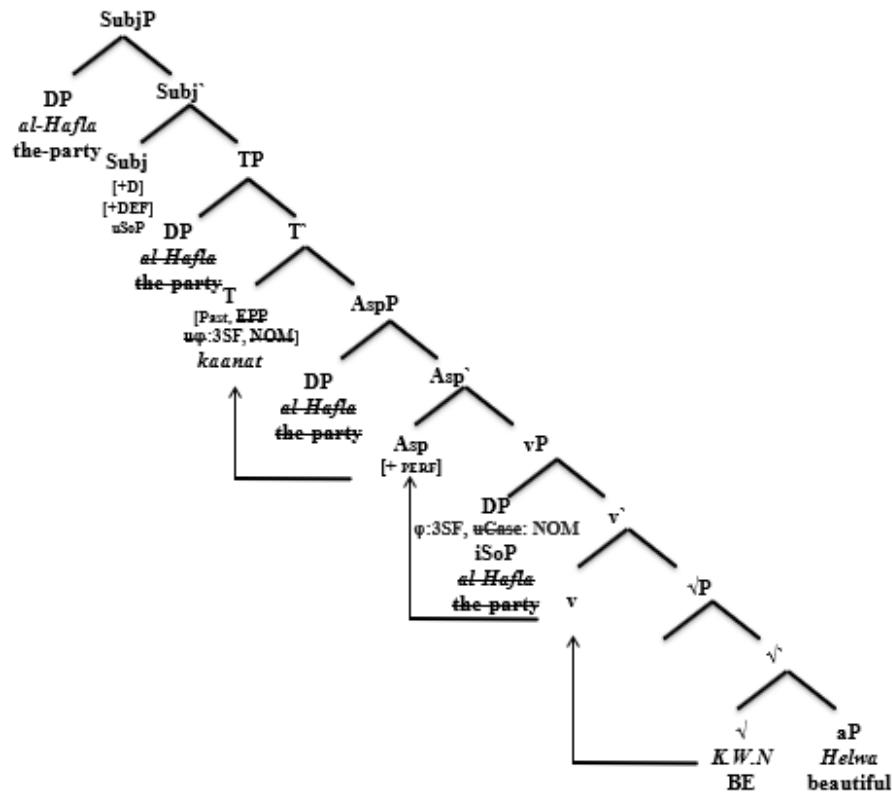
⁴⁸ In this dissertation, I do not address inverse copular sentences. In inverse copular sentences, a predicative DP moves to the preverbal position, and the grammatical subject remains postverbally (Cardinaletti 2004, Heycock and Kroch 1998, among others). Cardinaletti (2004) proposes that predicative DP in such a construction also moves to [Spec, SubjP]. I do not discuss the inverse copular sentence any further in this dissertation leaving it for future research.

- b. **helw-a* *al-ḥafl-a*⁴⁹ (Deictic Present Tense)
 beautiful-sg.f the-party.sg-F
 ‘The party is beautiful.’

As is the case with in non-copular sentences discussed in Chapter 4, I propose that post-copula subjects in the copular sentences in (27) stay in their lower position in [Spec, vP] whereas pre-copula subjects in (28) and (29) undergo a successive movement from [Spec, vP] to [Spec, SubjP] going through [Spec, AspP] and [Spec, TP], as shown in (30) below.

(30) a. The party was beautiful.

b.



⁴⁹ This sentence is ungrammatical in the natural word order of copular sentences, but it can be grammatically acceptable under certain circumstances as when the speaker highlights the description of the part as being beautiful. I perceive such a construction as inverse copular sentences but as I mentioned in the previous footnote in (37), the inverse copular construction is beyond the scope of the current dissertation.

I base my proposal of subject movement in (30) on the distribution of negation particles. Negation particles in copular sentences with null copulas always appear after, not before, subjects which indicates that subjects do not occupy the lower position in [Spec, vP].

- (31) a. al-ḥafl-a mu/ma-hi ḥelw-a
 the-party.sg-F NEG/NEG-3.sg.f beautiful.sg.f
 ‘The party (is) not beautiful.’
- b. *mu/ma-hi al-ḥafl-a ḥelw-a
 NEG/NEG-3.sg.f the-party.sg-F beautiful.sg.f

In Chapter 4, I discussed the definiteness restriction on preverbal subjects. Indefinite nominals are not allowed preverbally except when they are modified. The same restriction applies to subjects of copular sentences. Indefinite nominals can appear in pre-copula position only when they are modified (32). The string of a nominal followed by an adjective cannot receive a sentential interpretation and can only be interpreted as a phrase. In (32c), the adjective *Helwa* ‘beautiful’ is attributive rather than predicative.⁵⁰

- (32) a. *ḥalflat kanat ḥelwa
 party.pl.f be.perf.3.sg.f beautiful.3.sg.f
- b. ḥalflat kateera kanat ḥelwa
 party.pl.f much.sg.f be.perf.3.sg.f beautiful.3.sg.f
 ‘Lots of parties were beautiful.’
- c. ḥaflat ḥelwa
 party.pl.f beautiful.3.sg.f
 ‘Beautiful parties’ (It cannot mean ‘parties are beautiful.’)
- d ḥalflat kateer ḥelwa
 party.pl.f much.sg.f beautiful.3.sg.f
 ‘Lots of parties are beautiful.’

⁵⁰ Although unmodified indefinite nominals can appear after copulas, they are not in subject position. Rather, they are a part of the predicate.

- (i) kaanat ḥaflat ḥelwa
 be.perf.3.sg.f party.pl.f beautiful.sg.f
 ‘They were beautiful parties.’

Indefinite nominals can be preceded by existential or possessive particles as shown in (33). In this case, these nominals are not subjects but complements of the existential and possessive particles, and the following adjective are attributive rather than predicative (See Chapter 4 for more details on the structure of sentences involving existential and possessive particles).

- (33) a. *feeh* *ḥaflat* *ḥelwa*
 ex.3.sg.m party.pl.f beautiful.3.sg.f
 ‘There are beautiful parties’
- b. *ʕendi* *ḥaflat* *kateer* *arroḥ-ha*
 poss.1.sg party.pl.f much.sg.f attend.imperf.
 ‘I have lots of parties to attend.’

As I explained in Chapter 4, indefinite nominals, which lack determiners, need to be governed in the position they occupy. Longobardi (2000) suggests that indefinite nominals are ungrammatical in preverbal position because they need to be lexically governed by verbs, and preverbal subject position is not lexically governed in that sense. Following Zamparelli (1995, 2000) and Longobardi (2000) in Romance languages and Al-Qahtani (2016) in Najdi Arabic, I suggest that when bare indefinite nominals occur preverbally in Makkan Arabic, they are lexically governed by the modifiers which occupy the specifier of DP. Thus, modifiers allow indefinite nominals to appear preverbally and expand their distribution because they substitute the syntactic governing function of determiners (and verbs). Alternatively, bare indefinites can participate in existential and possessive constructions as complements of the existential and the possessive particles which license bare indefinite nominals preverbally. Having discussed overt subjects in copular sentences, I turn now to discuss cases in which subjects of copular sentences are optionally or obligatorily null pronouns.

5.3.2 Null subjects and expletives

It is assumed that overt subjects in present tense copular sentences, which lack verbal predicates, are obligatory unlike the case of other sentence types with verbal predicates in which null pronouns are allowed in subject position (Eid, 1991; Benmamoun, 2008; Aoun et al., 2010, Al-Balushi, 2012, among others). However, I argue that this assumption is not completely accurate.

In this section, I show two contexts of present tense copular sentences which lack overt subjects in addition to lacking verbal predicates. The first context is copular sentences with atmospheric predicates, whether the copula is phonologically overt or null (34).

- (34) a. marra bard al-yom
 very cold.sg.m today
 ‘(It is) very cold today.’
- b. kaan marra bard al-yom
 3.sg.m very cold.sg.m today
 ‘(It) was very cold today.’

The sentence in (34a) shows that present tense copular sentences, which lacks overt copulas, can also lack overt subjects. This observation goes against the common assumption that subjects in present tense copular sentences are obligatorily overt to satisfy the EPP feature (Eid, 1991; Soltan, 2007; Benmamoun, 2008; Hazout, 2010; Al-Balushi, 2011, 2012; Choueiri, 2016; Alharbi, 2017). Under such assumptions, present tense copular sentences demonstrate a structure that is not common in other sentence types. I propose that the EPP feature is satisfied in Makkan Arabic by the head movement of verbs to T in all sentence types including present tense copular sentences. The observation that present tense copular sentences with atmospheric predicates lack overt subjects support my proposal that the EPP feature is not satisfied by obligatory overt subjects.

Hazout (2010) discusses similar observations regarding weather predicates (atmospheric predicates in Hazout’s terms) in Hebrew. Hazout explains that non-verbal predicates in atmospheric verbless sentences do not assign thematic role to an external argument (35a). Licensing a null expletive in such structures indicates the presence of a functional projection TP which licences the null subject. Atmospheric clauses are ruled out in structures that can be analyzed as embedded infinite small clauses, such as the complementation of verbs like *ra’a* ‘see’ (35b).

- (35) a. kar kan.
 cold here
 ‘(It is) cold here.’

[Hazout, 2010: 473]

- b. *Dan ro'e [pro kar kan]
 Dan sees cold here

[Hazout, 2010: 480]

Hazout argues that atmospheric/weather predicates, occurring in verbless sentences, cannot have a predicational interpretation (i.e. an interpretation that would be paraphrased as *one is cold here*) because this interpretation requires the subject to be PRO, which appears in infinitive small clauses. The impossibility of predicational interpretation and of having PRO as a subject indicates that verbless sentences cannot be analyzed as root infinite small clauses. Rather, they are full clauses that can license null subject *pro*. These conclusions support my suggestion that null subjects are allowed in the so-called verbless sentences, unlike the common assumption that overt subjects are obligatory in present tense sentences that lack overt copulas.

In addition to atmospheric/weather predicates, present tense copular sentences with certain predicative adjectives that take clausal complements also obligatorily lack overt subjects (36).

- (36) *mostaheel* *axroj* *alyom*
 impossible.sg.m go out.imperf.1.sg today
 'It is) impossible that I go out today.'

I argue that the subject in (36) is a null expletive and that the adjective *mostaheel* 'impossible' carries the default agreement of the third person singular matching the null expletive. The adjective is a complement of the head v_{COP} , and the specifier of vP contains a null expletive subject. The head v_{COP} hosts the copula that moves to higher functional heads Asp and T carrying the features [present, deictic, -PERF, 3, single, masculine]. However, these features are realized by the null exponent that is specified for [- PERF, deictic] features.

Although Arabic is one of the languages that allow subjects to be null, it is assumed that subjects are obligatory in copular sentences that structurally lack copulas (Eid, 1991; Benmamoun, 2008; Aoun et al. 2010, Al-Balushi, 2012, among others). Recall that in this approach, verbless sentences (deictic present tense sentences) are suggested to have an underlying structure that is distinct from the other types of clauses in Arabic. However, I show in this chapter that subjects can be optionally null in such constructions, especially with first and

second subject pronouns.⁵¹ Null subjects may optionally occur before non-verbal predicates when such subjects are previously introduced in the context (37a).⁵² These non-verbal predicates can be coordinated with another verbal predicate as in (37b). In this way, I present a unified analysis that can apply to all clause types and with all types of predicates as verbal and non-verbal predicates equally.

(37) a. keef al-ṭalbat
 how the-student.pl.f
 ‘How are the students?’

muthams-een li al-madrsa
 excited-pl for the-school.sg..f
 ‘(They are) excited for school.’

b. keef-ik?
 how-2.sg.f
 ‘How are you?’

maara taṣban-a al-yom wa ḥata ma roh-t al-dwam
 very sick-sg.f today and even NEG go.perf-1.sg the-work
 ‘(I am) very sick today, and (I) did not even go to work.’

To sum up, I propose that null subjects in copular sentences are licensed by the verbal feature bundle on the head T that results from head movement of copula. In the case of overt subjects in copular sentences, they undergo movement to the specifier position of SubjP. One of

⁵¹ Subject pronouns are mostly null in Arabic because they can be recovered by agreement on the verbs, and there is no syntactic motivation to spell them out. However, subject pronouns can be emphasized by speakers and thus spelled out. While third person pronouns (e.g. *she*) can be replaced by nominals that refer to the same entity (e.g. *the girl*), which increases the options of spelling out the subject (either as third subject pronouns or overt nominals), first and second person pronouns can only be spelled out as pronouns. Because of this, first and second subject pronouns are mostly null, except when they get emphasized.

⁵² In non-copular sentences, null subjects can be easily recovered from agreement on the verb. However, in present tense sentences that lack overt copulas, subjects can be null but only when subjects are well-established in the context. The reason is that, unlike verbal predicates that carry full agreement with the subject, nominal and adjectival predicates have only partial agreement while complements such as prepositional phrases do not carry any agreement with the subject.

the main pieces of support for this argument is the occurrence of resumptive pronouns that result from the phrasal movement of subjects. I discuss these pronouns more in the following section.

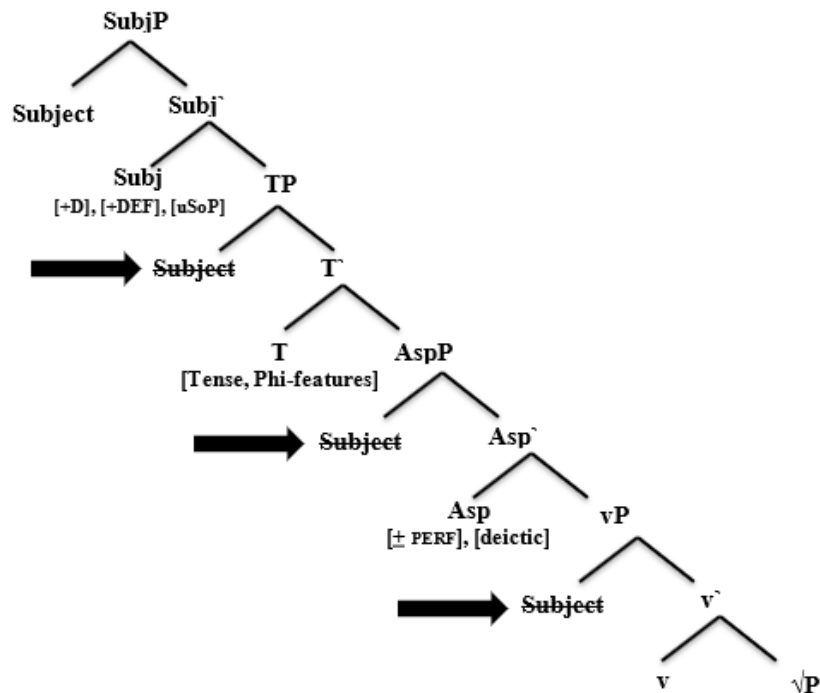
5.4 Resumptive pronominals and Prons

In this dissertation, I argue that subjects undergo successive movements from [Spec, vP] to [Spec, AspP] then to [Spec, TP] and finally to [Spec, SubjP]. Such subject movement results in copying the phi-features of the subjects in the specifier positions through which they have moved. These phi-features can be morphologically realized in the form of resumptive pronominals following the subject. In copular sentences with null copulas, resumptive pronominals appear after the subject (38a), but there is no way to decide if such resumptives occupy [Spec, TP], [Spec, AspP] or [Spec, vP]. In the case of copular sentences with overt copulas and the inflected aspect word *ged* ‘already’ (previously introduced in section 3.4.1), resumptive pronominals may appear before the copula (38b), in [Spec, TP], or between the copula and the aspect word (38c), in [Spec, AspP] or after the copula and the aspect word (38d), in [Spec, vP]. It is worth mentioning here that the inflected aspect word *ged-ha* in (38b), (38c) and (38d) is also evidence that the subject *al-bent* ‘the girl’ has moved through [Spec, AspP], leaving a copy of the phi-features cliticized onto the aspect word that occupy the head of AspP. In the diagram (39), I illustrate the positions in which a resumptive lower copy of the moved nominal is left behind in the specifier positions of vP, AspP and TP.

- (38)a. *al-bent* ***hya*** *şageera*
 the-girl.sg.f 3.sg.f little.sg.f
 ‘The girl (is) young.’
- b. *al-bent_i* ***hya*** *kanat* *ged-ha_i* *şageera*
 the-girl.sg.f 3.sg.f be.perf.3.sg.f already.3.sg.f little.sg.f
 ‘The girl, she was already young.’
- c. *al-bent_i* *kanat* ***hya*** *ged-ha_i* *şageera*
 the-girl.sg.f be.perf.3.sg.f 3.sg.f already.3.sg.f little.sg.f
 ‘The girl, she was already young.’

- d. al-bent_i kanat ged-ha_i **hya** şageera
the-girl.sg.f be.perf.3.sg.f already.3.sg.f 3.sg.f little.sg.f
‘The girl, she was already young.’

(39) Positions of resumptive pronominals



In Chapter 3, I presented resumptive pronominals that result from successive subject movement from [Spec, vP], to [Spec, SubjP] going through [Spec, AspP] and [Spec, TP]. These resumptive pronominals appear before or after the verb as shown in (40). I distinguished between these resumptive pronominals and the pronouns that may precede questions (41), referred to as question-marker pronominals

- (40) a. **al-bent** **hya** akal-at al-tofaḥ-a
the-girl.sg.f 3.sg.f eat.perf-sg-f the-apple.sg.f
‘The girl, she ate the apple.’
- b. **al-bent** akal-at **hya** al-tofaḥ-a
the-girl.sg.f eat.perf-sg-f 3.sg.f the-apple.sg.f
‘The girl, she ate the apple.’

- (41) **hya al-bent** akal-at al-tofaḥ-a
 3.sg.f the-girl.sg.f eat.perf-sg-f the-apple.sg.f
 ‘Is it the case that the girl ate the apple?’

In this chapter, I introduce a third category of pronominals that can only appear in present tense copular sentences which lack copulas. All copular sentences are composed of subjects and non-verbal complements.⁵³ When the predicate is a prepositional phrase, adjective phrase or indefinite nominal, the copular sentence is known as predicational (42). When the complement is a definite referential nominal as in (43), the copular sentence is known as equational (Eid, 1991 and Choueiri, 2016). In equational copular sentences, the subject and the complement of the head *v* are both referential (definite) nominals referring to the same individual or entity by co-indexing.⁵⁴ In equational copular sentences in which copulas are null, an obligatory third-person pronoun appears after the subject as shown in (43) below.

- (42) a. oxt-i tayb-a
 sister.sg.f-1.sg kind-sg.f
 ‘My sister is kind.’
 b. oxt-i talb-a
 sister.sg.f-1.sg student-sg.f
 ‘My sister is a student.’
 c. oxt-i fi al-jamʕa
 sister.sg.f-1.sg in the-university.sg.f
 ‘My sister is in the university.’
- (43) oxt-i_i *(hya) ḥalimah_i
 sister.sg.f-1.sg 3.sg.f Halimah
 ‘My sister is Halimah.’

Eid (1991) and Choueiri (2016) explain that equational sentences are problematic because the subject and the complement, despite referring to the same entity, are distinct arguments and must have distinct thematic roles. It is usually the predicate that assigns a thematic role to the

⁵³ Preverbal subjects are always definite unless they are licensed by modifiers or preceded by existential particles.

⁵⁴ Definite nominals, proper names and pronouns are referential in the sense that they identify an individual or an entity.

subject rather than receiving a thematic role as is the case with equational present tense copular sentences. Also, Choueiri (2016) points out that the subject and the predicate belonging to the same category (i.e. DP) makes them too similar and must be distinguished. Because of this, an obligatory third-person pronoun, known in the literature as pronominal copula or Pron, appears after the subject in Arabic (and Hebrew) present tense equational sentences (Doron, 1986; Eid, 1991; Ohullah, 2013; Choueiri, 2016). However, these obligatory pronominal copulas can be confused with the optional resumptive pronominals (as is the case with Ouhalla, 2013) that may appear in any sentence types, including copular sentences. Accordingly, it is important at this point to tease the two categories of pronominal elements apart and discuss the different position, distribution and analysis of each category.

The first difference between Prons and resumptives is in the type of sentence that each category can appear in. Prons are restricted to equational deictic present tense sentences while resumptive pronominals can appear in any sentence type, except equational ones. In predicational deictic present tense copular sentences (which lack overt copulas), a resumptive pronominal matching the subject in gender and number occupies a position after the subject (44). In copular sentences with overt copulas, a resumptive pronominal can appear before or after the copula verb (45). In equational copular sentences, Prons are obligatory after the subject if the copula is null (46a). When there is an overt copula, the pronoun is optional and is interpreted as a resumptive (46b).

- (44) a. al-ḥafl-a (hya) ḥelw-a
 the-party.sg-F 3.sg.f beautiful-sg.f
 ‘The party, it is beautiful.’
- b. al-ḥafl-a (hya) xoraf-a
 the-party.sg-F 3.sg.f legend-sg.f
 ‘The party, it is a legend ‘legendary).’
- c. al-ḥafl-a (hya) fi al-fondog
 the-party.sg-F 3.sg.f in the-hotel.sg
 ‘The party, it is in the hotel.’

- (45) a. al-ḥafl-a (hya) kaanat (hya) ḥelw-a
 the-party.sg-F 3.sg.f be.perf-3.sg.f 3.sg.f beautiful-sg.f
 ‘The party, it was beautiful.’
- b. al-ḥafl-a (hya) kaanat (hya) xoraf-a
 the-party.sg-F 3.sg.f be.perf-3.sg.f 3.sg.f legend-sg.f
 ‘The party, it was a legend ‘legendary).’
- c. al-ḥafl-a (hya) kaanat (hya) fi al-fondog
 the-party.sg-F 3.sg.f be.perf-3.sg.f 3.sg.f in the-hotel.sg
 ‘The party, it was in the hotel.’
- (46) a. al-ḥafl-a *(hya) al-mojkela
 the-party.sg-F 3.sg.f the-problem-sg.f
 ‘The party is the problem.’
- b. al-ḥafl-a (hya) kaanat (hya) al-mojkela
 the-party.sg-F 3.sg.f be.perf-3.sg.f 3.sg.f the-problem-sg.f
 ‘The party was the problem.’

Another distributional difference between the two types of pronouns is that resumptive pronouns cannot appear after other subject pronouns (47a) while Prons can appear after first and second-person pronouns (47b). Note that Prons are always in third-person forms and match the subjects in number and gender only.

- (47) a. *enti hya muʃkil-a
 2.sg.f 3.sg.f problem.sg.f
 ‘you are a problem.’
- b. *enti enti muʃkil-a
 2.sg.f 2.sg.f problem.sg.f
 ‘you are a problem.’

- c. enti hya al-muʃkil-a⁵⁵
 you.sg.f 3.sg.f the-problem.sg.f
 ‘you are the problem.’

In the literature on Arabic syntax, these two types are sometimes confused and thought to represent the same category, and a unified analysis may be proposed to cover the optional versus the obligatory appearance of these pronouns, as is the case with Ouhalla (2013). Other studies completely ignore the occurrence of optional resumptive pronominals in their analysis of possible pronominals in copular sentences (Doron, 1986; Eid, 1991; Choueiri, 2016). For the position of obligatory Prons, I adopt the analysis of Choueiri (2016) and Alharbi (2017) that Prons are restricted to equational sentences, as opposite to predicational sentences, and are introduced by a functional projection (FP). Choueiri (2016) assumes that equational sentences are more complex in the sense that they are composed of the Predicate Phrase (PredP), which is present in predicational sentences as well, and an additional Functional Projection (FP) which introduces Prons. However, I follow Alharbi (2017) and depart from Choueiri’s (2016) analysis in which equational and predicational sentences both involve a Predicational Phrase (PredP). Alharbi suggests that only predicational sentences involve PredP while equational sentences involve a FP. Alharbi argues that subjects and predicates in equational sentences are both referential and none of them is a predicate of the other. Alharbi analyzes the obligatory pronominal element as a realization of the head F that denotes the identity relation.

⁵⁵ When the subject is a first- or second-person pronoun as in (i) and does not match the referential nominal predicate in gender, more restrictions apply, and the order of the two referential nominal is reversed, so that the referential nominal appears first and the pronoun appears after the Pron (for more details on this construction, see Choueiri, 2016). I do not address this issue any further in this dissertation.

- (i) enta *hwa/*hya al-muʃkil-a
 you.sg.m 3.sg.m/f the-problem.sg.f
 ‘You are the problem.’
- (ii) al-muʃkil-a hya/*hwa enta
 the-problem.sg.f 3.sg.f /3.sg.m you.sg.m
 ‘The problem is you.’

Nevertheless, I follow Choueiri who rejects analyzing Prons as a part of the nominal complement (Eid, 1991) and as a present counterpart of past copulas (Eid, 1991 and Ouhalla, 2013). Choueiri rejects Eid's (1991) analysis in which Prons are viewed as identity pronouns that are part of, and always agree with, the nominal predicates. According to Eid, these identity pronouns are used as an anti-ambiguity device to force the sentential interpretation, rather than the phrasal interpretation. Eid suggests that the identity pronoun is the head of the NP argument which enables it to assign thematic role to its sister NP, and then the whole NP assigns a thematic role to the subject. Choueiri argues that Prons cannot be analyzed as part of, and always agreeing with, the nominal predicates since Prons agree with the subject not the nominal predicate, as shown in (48) where the Pron is inflected as feminine to match the subject not as masculine to match the nominal predicate.

- (48) ha-l-zariibe hiyye/*huwwe bayt-ak
 this-the-sty.sg.f 3.sg.f/3/sg.m house.sg.m-2.sg
 'This sty is your house.'

[Choueiri, 2016:113]

Eid (1991) also assumes that the obligatory Prons, which appear in present tense copular sentences, are in complementary distribution with the copular verb *kaan*, which appear in non-present copular sentences.⁵⁶ This shows that the copula verb *kaan* and the third person pronouns Prons both occur in the same structural position since the verb *kaan* "will replace the pronoun head of NP; and being a verb, it will head a VP rather than NP" (Eid, 1991:58). Although Prons and copulas may appear similar on the surface level, Choueiri rejects analyzing Prons as present tense counterparts of the copula because of many reasons. First, copulas show full agreement with the subject while Prons do not agree with subjects for person (since it is always in the third person). Also, while copulas can appear with verbal and non-verbal predicates, Prons are only compatible with referential nominal predicates (49). In addition, copulas can precede the subject whereas Pron can only occur between the subject and the predicate (50).

⁵⁶ Eid (1993), among others, does not discuss the appearance of imperfective copulas in non-deictic present tenses.

- (49) a. ma ħada **keen** ʕam yirkud
 NEG someone.sg.m be.perf.3.sg.m asp. run.imperf.3.sg.m
 ‘No one was running.’
- b. ma ħada (***huwwe**) ʕam yirkud
 NEG someone.sg.m 3.sg.m asp. run.imperf.3.sg.m
 ‘No one is running.’
- (50) a. (keen-it) alya (keen-it) l-meʃkle
 be.perf-3.sg.f Alya be.perf-3.sg.f the-problem.sg.f
 ‘Alya was the problem.’
- b. (*hiyye) alya *(hiyye) l-meʃkle
 3.sg.f Alya 3.sg.f the-problem.sg.f
 ‘Alya was the problem.’

[Choueiri, 2016: 109-110]

In other studies in the literature of Arabic syntax, Prons are analyzed as the phonological realization either of verbal features (Doron 1986) or nominal features (Benmamoun 2008). However, these analyses are incompatible with the assumptions of the current dissertation. More specifically, Doron (1986) considers Prons as the phonological realization of unattached agreement features, but this analysis matches the analysis that I suggest for optional resumptive pronouns. Prons are obligatory and have the function of denoting the identity relation, which is not reflected in Doron’s analysis. In other words, this analysis does not differentiate between obligatory Prons and optional resumptive pronouns.

In response to Doron’s analysis, Benmamoun (2008) argues that in Arabic, Prons (which appear only in the present tense) are the realization of nominal features of Tense. Recall that Benmamoun argues that the present tense in Arabic is only specified for nominal features [+D] (i.e. gender and number only) unlike the past tense that is specified for nominal and verbal features [+ D] and [+ V]. Thus, Benmamoun argues that since Prons only appear in the present tense (which is only specified for gender and number nominal) and are always in the third person form (lacking the person feature), these Prons are realization of the nominal feature [+D] of tense. This analysis goes against the assumptions that underlie the current dissertation in which the present tense and past tense have the same underlying structure.

One last point needs to be mentioned in analyzing Prons in the Arabic literature. It is observed throughout the studies above (Doron, 1986; Eid, 1991; Benmamoun, 2008; Choueiri, 2016; Alharbi, 2017) that there is a consistent focus that Prons only appear in equational sentences. However, Ouhalla (2013) does not draw such a line between obligatory Prons and optional resumptives and rather argues that “optional Prons” can be the present tense form of the auxiliary verb *kaan* (51). More specifically, Ouhalla states that Prons can be optional in the present tense and can appear before verbal, adjectival or nominal predicates, which is against the consistent literature that Prons are obligatory and can only appear in equational copular sentences that lack overt copulas. The data presented are from Moroccan Arabic, which resembles Makkan Arabic in this regard.

(51)a. (al-bnat) huma (al-bnat) kayqra-w al-ktab
 (the-girl-pl.f) PRON.3.pl (the-girl-pl.f) read.imperf-3.pl the-book.sg.m
 ‘The girls are reading the book.’

b. (al-bnat) kan-u (al-bnat) kayqra-w al-ktab
 (the-girl-pl.f) be.perf-3.pl (the-girl-pl.f) read.imperf-3.pl the-book.sg.m
 ‘The girls were reading the book.’

[Ouhalla, 2013: 316]

(52)a. (al-bnt) kan-t (al-bnt) mariḍ-a
 (the-girl-sg.f) be.perf-3.sg.f (the-girl-sg.f)
 ‘The girl was sick.’

b. al-wlad (huma) marḍ
 the-kid.pl (PRON.3.pl) sick.pl
 ‘The kids were sick.’

[Ouhalla, 2013: 320]

I argue in this dissertation that the optional pronominal elements, that may appear before verbal, adjectival or nominal predicates, which Ouhalla (2013) refers to as optional Prons, are resumptive pronominals resulting from successive subject movement. Prons, on the other hand, are obligatory elements as represented by the work of Eid (1991), Choueiri (2016) and Alharbi (2017). Thus, the two categories of pronouns have completely different functions, distribution and underlying structure. I follow Alharbi (2017) that Prons are introduced as head of the functional projection (FP) to denote the identity relations.

5.5 Summary and conclusion

In this chapter, I argued against a few common assumptions regarding the syntactic structure of copular sentences in Arabic. First, it is commonly assumed that Arabic copular sentences completely lack copulas in the present tense, and that this absence of the copula is structural and associated with specifications of the present tense (in comparison with the past tense). More specifically, it is suggested that the present tense in Arabic is defective, from which it follows that the underlying syntactic structure of present tense copular sentences is completely different from their non-present tense counterparts and also from the structure of sentences with verbal predicates.

I explicitly argued against these assumptions by demonstrating that, first, copulas can appear in the present tenses, and that their “assumed” absence is only phonological and is associated with the presence of the deictic feature on the head of AspP. In other words, the null copula is the realization of the deictic aspectual morpheme in Arabic copula verbs. Secondly, I argued that the semantic and syntactic features of copulas are fully specified on the terminal nodes, and that they are morphologically realized as a null element in the deictic present tense. I also departed from the common assumption that subjects are obligatory in copular sentences that lack copulas as I presented various cases in which subjects can be optionally or obligatorily null pronouns.

The analysis that I proposed for copular sentences in Arabic has many advantages. First, I suggested a unified account of copular and non-copular sentences in Arabic that equally apply to all tenses. The previous accounts in the literature of copular sentences that lack copulas, or verbless sentences, consider that these structures have a unique structure that is distinct from the sentence structures of other sentence types. Also, these accounts mostly associate the structural presence or absence of copulas to assumed structural differences between present tense versus past tense. However, these generalizations in characterizing present tense and past tense in copular sentences do not accurately apply to non-copular sentences. Additionally, most of these accounts require two different EPP features: one that is checked via subject movement to derive

SVO and one that is checked via verb movement to derive VSO sentences. My proposed account requires the same EPP feature across all tenses and all sentence types.

Chapter 6

The Double Preverbal Subject Construction

6.1 Introduction

Recall from previous chapters that Arabic allows SVO and VSO word orders in simple root sentences as shown in Chapters 3 and 4. Thus, nominals can appear either before the verb as in (1a) or after the verb as in (1b).

- (1) a. **al-walad** akal al-tufaḥa
The-boy.sg ate.sg.M the-.apple-sg.F
'The boy ate the apple'
- b. akal **al-walad** al-tufaḥa
ate.sg.M the-boy.sg the-.apple-sg.F
'The boy ate the apple'

Arabic also allows two nominals to appear preverbally as shown in (2) where the first nominal *al-tufaḥa* 'the apple' is followed by a complete sentence *al-walad akal-ha* 'the boy ate it' that has another nominal in its preverbal position. The sentential predicate obligatorily includes a resumptive pronominal that is co-indexed with the first nominal *al-tufaḥa* 'the apple'.

- (2) a. al-tufaḥa **al-walad** akal-ha
the-.apple-sg.F The-boy.sg ate.sg.M-3.F.sg
'The apple, the boy ate it.'
- b. *al-tufaḥa **al-walad** akal
the-.apple-sg.F The-boy.sg ate.sg.M
'The boy ate the apple.'

I call this the Double Preverbal Subject (DPS) construction, and it is the main focus of this chapter. I refer to the first nominal in this construction as the "outer" nominal and the second as the "inner" nominal. The outer nominal in the DPS construction is followed by a sentential predicate while the inner nominal is followed by a non-sentential predicate such as a verbal or

copular predicate. Sentential predicates after outer nominals are either in VS (3a) or SV (3b) word order.

- (3) a. al-bent **jaa-t** **omm-ha**
 the-girl.sg.F came.Perf.3.sg-F mother.sg-3.sg.F
 ‘The girl, her mother came (Lit. The girl, came her mother)’.
- b. al-bent **omm-ha** **jaat**
 the-girl.sg.F mother.sg-3.sg.F came.Perf.3.sg-F
 ‘The girl, her mother came.’

As shown in the examples, the predication sentence after the outer nominal appears with an obligatory resumptive pronominal that is co-indexed with it. These resumptive clitics can occur in different positions in the predication sentence, such as the possessor (4a), direct object (4b), indirect object (4c) and object of preposition (4d).

- (4) a. al-bent **omm-ha** **jaat**
 the-girl.sg.F mother.sg-3.sg.F came.Perf.3.sg-F
 ‘The girl, her mother came.’
- b. al-bent (ana) **zort-ha**
 the-girl.sg.F (I) visit.perf.1.sg-3.sg.F
 ‘The girl, I visited her.’
- c. al-bent (humma) **?addo-ha** ḥalawa
 the-girl.sg (they) gave.perf.3.pl-3.sg.F candy.sg.F
 ‘The girl they gave her a candy.’
- d. al-bent ana muḍayg-a **men-ha**
 the-girl.sg.F 1.sg upset.sg-F- from-3.sg.F
 ‘The girl, I am upset with her.’

The DPS construction is controversial in Arabic, and this controversy stems from the status of preverbal subjects in Arabic (see Chapter 4 for more details on the status of preverbal subjects in Arabic). Preverbal nominals, in general, are commonly analyzed by many traditional Arabic grammarians as well as some modern Arab linguists as topics or left-dislocated phrases (Eid 1975; Hassan 1975; Al-Makhzomi 1986, Alazzawi 1990, Al-Samurra’i 2001, Soltan 2007, Al-Kawari 2008, Al-Balushi 2011, 2012, among others). This group of researchers consider

Arabic to be a VSO language in which only postverbal nominals are genuine subjects. An alternative approach allows subjects in both preverbal and postverbal positions. For this group of researchers, the SVO sentences are derived from their counterpart VSO sentences through transformational rules (Mohammad 1990, Ouhalla 1994, Benmamoun 2008, Aoun, Benmamoun and Choueiri 2010).

Because there is no consensus on the status of preverbal nominals that are followed by verbal and non-verbal predicates, the status of clause-initial nominals, or the outer nominals, that are followed by a complete sentence is also debated. Some argue that the outer nominals are subjects (Doron and Heycock, 1999, 2010; Heycock and Doron, 2003 and Alexopoulou, Doron and Heycock, 2004), while others maintain that the outer nominals are instances of clitic left dislocation (Landau, 2009, 2011). I argue in this chapter that outer nominals are subjects.

In Chapter 4, I discussed the structure of sentences in which preverbal nominals are followed by verbal predicates, and in Chapter 5, I presented copular sentences in which pre-copula nominals are followed by non-verbal predicates. In this chapter, I focus on nominals that are followed by sentential predicates. I suggest that in all three cases, these preverbal nominals are subjects in [Spec, SubjP] and are derived by successive movements that leave a copy of their phi-features in the positions that they have moved from.

The position of outer nominals with respect to *wh*-phrases is significant in indicating the position they occupy in the clause structure. Because of this, I discuss the distribution of outer nominals co-occurring with *wh*-phrases in detail, especially since modern Arabic dialects differ from Standard Arabic in this regard. In Standard Arabic, the outer nominals of the DPS construction can only precede *wh*-phrases:

- (5) a. naadya mataa raʔaa-ha sami
 nadia when saw.sg.M-her sami
 ‘Nadia, when did Sami see her?’
- b. *mataa naadya raʔaa-ha sami
 when nadia saw.sg.M-her sami
 ‘When Nadia, did Sami see her?’

[Aoun, Benmamoun and Choueiri 2010:191]

The same distribution is observed in Hebrew (Landau, 2009). Outer nominals precede and never follow wh-phrases in Hebrew:

(6) a. ha-baxur ha-ze, le'an amru lo lalexet?
 the-guy the-this where said.3.pl to.him to.go
 'This guy, where did they tell him to go?'

b. *le'an ha-baxur ha-ze, amru lo lalexet?
 where the-guy the-this said.3.pl to.him to.go

[Landau, 2009: 97]

In Arabic dialects including Makkan Arabic (Aoun and Benmamoun 1998, Aoun, Benmamoun and Choueiri 2010 for Lebanese and Moroccan Arabic), wh-phrases can precede or follow outer nominals (7). However, when the outer nominals are separated from their resumptive clitics by an island, the wh-phrase can only follow them (6).⁵⁷

(7) a. **naadya** ?eef (humma) galo la-ha
 nadia what (they) said.p.M to-her
 'Nadia, what did they tell her?'

b. ?eef **naadya** (humma) galo la-ha
 what nadia (they) said.p.M to-her
 'Nadia, what did they tell her?'

(8) a. **naadya** ?eef galo li al-wald [?elle jaaf-ha]
 nadia what said.p.M to the-boy.sg that saw.sg.M-her
 'Nadia, what did they tell the boy who saw her?'

b. *?eef **naadya** galo li al-wald [?elle jaaf-ha]
 what nadia said.p.M to the-boy.sg that saw.sg.M-her
 'What Nadia, did they tell the boy who saw her?'

Thus, unlike Standard Arabic and Hebrew which restrict outer nominals to the position preceding wh-phrases, modern Arabic dialects are more permissive as they allow outer nominals both before and after wh-phrases. I expand the discussion on the position of outer nominals with

⁵⁷ The resumptive clitic is separated from the outer nominals by an island when the clitic occurs in a relative or an adjunct clause.

respect to *wh*-phrases more in section 6.2 below. The island sensitivity differences between the examples in (8) are addressed in section 6.3 to argue that outer nominals in the DPS construction are derived by movement rather than base-generation.

After discussing the position of outer nominals, I argue that outer nominals are derived by movement from lower non-subject positions (e.g., direct and indirect objects and possessors) leaving an obligatory resumptive pronominal in the original position of the moved nominal. Recall that I suggested previously that movement of subjects from their first-merge position leaves resumptive pronominal copies that can optionally spell out. I assume that one main difference between outer and inner nominals in the DPS construction is in the type of predicate that follows them and the position from which they move. Unlike the inner nominals in the DPS construction that are followed by verbal or non-verbal predicates, I show that outer nominals are followed by a sentential predicate.

This chapter is organized as follows. In section 6.2, I discuss the position of outer nominals in the clause structure. I present the various analyses that are proposed in the literature on Arabic syntax for the DPS construction; the left-dislocation analysis and the broad subject analysis. In section 6.2.1, I briefly explain the types of left dislocation, and the arguments related to outer nominals, and in section 6.2.2, I present the broad subject analysis. In section 6.2.3, I present the analysis that I propose for the position of outer nominals in [Spec, SubjP]. Section 6.3 is devoted to the derivation of the outer nominals in the DPS construction. In section 6.3.1, I present the analysis of Aoun and Benmamoun (1998) who propose two types; one that is derived by movement and another that is derived by base generation. I argue against the base-generation approach in section 6.3.2 and propose an alternative movement approach in section 6.3.3. In this section, I address the issue of Case since the outer nominals bear either accusative or genitive Case in their base position but surface with nominative Case. I discuss sentences in which more than one nominal undergoes movement which results in intersecting movements, and I specify the principle that decides the order of movement in Makkan Arabic. I also address possessor extraction of nominals into clause-initial position. I finally discuss the association between resumption and the movement analysis that I propose. The goal of this chapter is to present an analysis for the position and the derivation of the outer nominals in the DPS construction that is

compatible with the analysis of preverbal subjects in Arabic presented in the previous chapters, thus encompassing various types of predications.

6.2 The position of outer nominals

In this section, I investigate the position of the outer nominals in the DPS construction in Makkan Arabic. I first introduce the types of left-dislocation since outer nominals are commonly analyzed as left-dislocated nominals (Al-Azzawi, 1990; Soltan, 2007; Al-Balushi, 2012; Jarrah, 2020, among others). According to this approach, outer nominals are in an A-bar position above CP (Landau 2009, 2011). I then introduce the broad subject analysis in which outer nominals are proposed to occupy an A-position in the specifier of TP (Doron and Heycock 1999, 2010, Heycock and Doron 2003, Alexopoulou, Doron and Heycock 2004). I argue against both positions and suggest that outer nominals in the DPS construction occupy the specifier position of SubjP between CP and TP. However, I do not rule out the option that such nominals may move further to [Spec, TopP] in the CP domain.

6.2.1 Types of Left Dislocation

It is important to distinguish between clitic left dislocation and other types of left dislocation and to explore the role of island sensitivity in each type. According to Prince (1997), left-dislocation (LD) refers to the constructions where “a non-vocative noun phrase appears in initial pre-clausal position, coreferential with a personal (resumptive) pronoun occurring somewhere in the clause” (p.118).⁵⁸ When defining LD, there is a shared consensus on the presence of a fronted phrase, usually but not necessarily a noun phrase, at the beginning of a complete saturated clause and on a resumptive element that connects the phrase with the clause. The clause is “about” the left-dislocated phrase, which is referred to as the “aboutness requirement” and is satisfied by the presence of the resumptive pronoun in most cases (Ross 1967; Gluykens 1992; Prince 1997; Van

⁵⁸ Vocative NPs are used to address speakers to whom the speech is directed as in *John, do you want to have coffee?*

Riemsdijk 1997, Anagnostopoulou 1997; Alexiadou 2006).⁵⁹ The most common types of LD are Hanging-Topic Left Dislocation (HTLD), Contrastive Left Dislocation (CLD) and Clitic Left Dislocation (CLLD). One basic difference between these types is the form and the position of the resumptive pronoun.

The first type is Hanging-Topic Left Dislocation (HTLD) which is employed mostly in English and Greek. In this type, the resumptive pronoun is in the form of a regular personal pronoun. HTLD is not sensitive to island constraints as in the Greek example in (9) where the topic *Mary* co-refers with the pronoun *her* inside a complex NP island. This observation is important because if the left-dislocated NP can violate island constraints, this suggests it is base-generated into sentence-initial position.

- (9) I maria htes gnorisa ton andra pu tin pandreftike.
 the Mary-NOM yesterday met the man that her married
 ‘As for Mary, I met yesterday the man that married her.’

[Alexiadou, 2006: 674]

The second type of left dislocation is Contrastive Left-Dislocation (CLD) which is typical in German and Dutch and is characterized by using demonstrative pronouns after the left-dislocated phrase. The following example (10) from Dutch exemplifies the demonstrative pronoun *die* after the noun phrase. CLD is strictly sensitive to all island constraints as illustrated in (11) from Dutch where the complex noun island is violated.

- (10) die man die ken ik niet.
 The man that know I not
 ‘That man, I don’t know him’.

[Alexiadou 2006: 669]

⁵⁹ In French, there is a Loose Aboutness Left Dislocation (LALD) which lacks the presence of resumptive pronouns as in *Oh, tu sais, moi, la bicyclette, je n'aime pas me fatiguer* [Oh, you know, me, the bicycle, I don't like to tire myself] (Riemsdijk 1997).

- (11) *jan, die vertelde Piet [het verhaal [dat hij **t** verslagen had]]⁶⁰
 *John, that told Peter [the story [that he **t** beaten had]]
 ‘John, Peter told the story that he had beaten’.

[Anagnostopoulou 1997: 156]

The third type of left dislocation is Clitic Left-Dislocation (CLLD) which is found in Italian, Spanish, Hebrew, Arabic and Greek. The left-dislocated phrase in this type is connected to the following clause with a resumptive clitic pronoun as shown in example (12) from Greek.

- (12) ton jani den ton ksero
 the-ACC John-ACC neg cl-ACC know-1sg
 ‘John, I do not know him.’

[Alexiadou 2006: 669]

What is puzzling about CLLD is that it does not show unified behavior with regard to island sensitivity. Long-distance CLLD freely violates weak islands such as the wh-type island (13a), but not the relative clause type (13b) as shown in the Greek example below.

- (13)a. to forema den ksero pu na to valo
 The dress not know-I where to it put
 ‘The dress, I don’t know where to put’

- b. *ton kosta sinantisa tin kopela pu ton idhe
 *The Kostas met-I the girl who him saw
 ‘Kostas, I met the girl who saw him’

[Anagnostopoulou 1997: 160, 172]

The inconsistency in island sensitivity is known as “Cinque’s paradox”. Many studies attempt to solve this dilemma either by suggesting covert movement at LF, or by treating island sensitivity as a continuum based on the strength of the island and the distance between elements (Cinque 1990; Demirdache 1991 and Anagnostopoulou 1997).

The three types of left dislocation are summarized in Table 13 below.

⁶⁰ The original example does not include indexing to indicate what is co-indexed with **t**.

	HTLD	CLD	CLLD
Typical languages	English - Greek	German -Dutch	Italian – Spanish – Arabic – Hebrew Greek
Form of the pronoun	Personal pronoun/none	Demonstrative pronoun	Clitic resumptive pronoun
Island sensitivity	Not sensitive to island constraints	Strictly sensitive to all island constraints	Violate weak islands (wh-island) sensitive to strong islands as relative clause
Derivation of the LDeD phrase	Base-generation	Movement	Controversial (Cinque’s paradox)

Table 13: Types of left dislocation

In the following section, I present arguments in favor of outer nominals being in an A-position, referred to as broad subjects, and I also present counter arguments against broad subjects in which outer nominals are clitic-left dislocated nominals.

6.2.2 The Broad-subject analysis: A-position versus A-bar position

One analysis of the outer nominals in the DPS construction is presented by Doron and Heycock (1999, 2010), Heycock and Doron (2003) and Alexopoulou, Doron and Heycock (2004).

According to this view, the outer nominal in the DPS construction is a broad subject. Thus, *al-bayt* ‘the house’ and *Ruti* in example (14) from Arabic and Hebrew respectively are considered broad subjects while *alwanu-hu* ‘its colors’ and *sof-a* ‘her end’ are the narrow subjects.

(14) a. **al-bayt-u** alwaan-u-**hu** zaahiyat-un
 the-house.sg-NOM color.pl-NOM-3.sg.m bright.sg.f-NOM
 ‘The house, its colors are bright.’

b. *ruti* *sof-a* *le-naceax*
 Ruti end-hers to-win
 ‘Ruti will end up winning’ (Lit. ‘Ruti, her ending is to win’)

[Doron and Heycock 1999:70-71]

Doron et al. suggest that this construction resembles one in Japanese where simple sentences can contain two or more nominals that all carry nominative case marked with *-ga*. In Japanese, there are two types of such multiple-nominative constructions (Akiyama, 2005). The

first type involves a relation of inalienable possession between the two nominative nominals as in (15) while the second type does not show such a relation of possession between the nominals as in (16) below (Heycock 1993, Akiyama 2004 and 2005, Tateishi 2006 among others). As the examples in (15) and (16) show, the nominative case marker *-ga* is attached to both nominals, and they both occur in preverbal positions.

- (15) a. **taro-ga** **te-ga** naga-i
 Taro-Nom arm-Nom long-Pres
 ‘Taro’s arms are long.’

- b. **taro-ga** **imooto-ga** nakunat-ta
 Taro-Nom younger sister-Nom die-Past
 ‘Taro’s younger sister died.’

- (16) a. **haru-ga** **tai-ga** uma-i
 spring-Nom sea bream-Nom tasty-Pres
 ‘Sea breams are tasty in spring.’

- b. kono **bangumi-ga** yuumei-na **haiyuu-ga** yoku shutuen-su-ru
 This program-Nom famous actor-Nom often appearance-do-Pres
 ‘Famous actors often make their appearance on this program.’

[Akiyama 2005: 2]

In Japanese, topicalized (or left-dislocated) nominals carry the case marker *-wa* which distinguishes them from subjects carrying the nominative case marker *-ga*. The choice between subjects and topics depends on the pragmatic context in the rest of the sentence following the nominals (Takami and Kamiob 1996).

- (17) a. **buturigaku-wa** syuusyoku- ga taihen da
 physics- Top finding-jobs-Nom difficult Cop
 ‘[As for] physics, finding a job is difficult.’

[Heycock 1993: 179]

- b. **zoo -wa** hana -ga nagai.
 elephant-Top trunk -NOM is-long
 ‘Elephants have long trunks.’

[Takami and Kamiob 1996: 208]

Heycock (1993) suggests that predication can license nominative case *-ga* to nominals without being assigned a thematic role and calls such nominals “non- θ ga-phrases”. These nominals have the syntactic properties of subjects just like thematic subjects. In addition to bearing nominative case and the ability to bind reflexive pronouns, non- θ ga-phrases can take accusative case *-o* as an alternative to *-ga* in embedded clauses.

- (18) minna-wa **tookyo-ga/o** sekai-iti **hanzairitu-ga** hikui
all- Top Tokyo-Nom/Acc world-one crime-rate-Nom is-low
to omotte- iru rasii ga...
that thinking are seems but ...
‘Everyone seems to think that Tokyo has the lowest crime rate in the world, but...’
[Heycock 1993: 197]

The construction of multiple nominatives in Japanese is considered peculiar since it challenges Chomsky’s (1995) original theory of phrase structure rules where every clause has one subject that is governed by a syntactic category of Tense or Agreement. Nominative Case is thus assigned to one unique specifier. Numerous studies accounts for the derivation of the multiple nominative construction in Japanese (Heycock 1993; Ura 1996; Hiraiwa 2001; Akiyama 2004, 2005; Tateishi 2006 among others). Hiraiwa (2001), among others, attempts to refine Chomsky’s approach by suggesting Multiple Agree instead of Agree to account for the mechanism of feature-checking in multiple nominative constructions (I argue in section 6.3.3 below that Multiple Agree does not work to account for the DPS construction in Makkan Arabic).

Returning to Arabic and Hebrew, Doron and Heycock (1999) argue that Standard Arabic and Hebrew can license nominative case on more than one element, namely on broad subjects and narrow subjects, as in Japanese. Doron and Heycock (1999) analyze broad subjects as base-generated in the specifier of TP whereas narrow subjects are derived by A-movement from a lower subject position to [Spec, TP] to check agreement and EPP features. Doron and Heycock thus argue for the possibility of multiple specifiers of the TP projection. The difference between the two subjects is that broad subjects are arguments that are followed by sentential predicates (i.e., a complete clause that already has a subject and a predicate) while narrow subjects are arguments of the verb. In later studies supporting the broad-subject analysis, Heycock and Doron

(2003), Alexopoulou, Doron, Heycock (2004) and Doron and Heycock (2010) employ further semantic and syntactic arguments that include examples from a modern Arabic variety, namely Levantine Arabic. They employ various diagnostic subjecthood tests to support their arguments. The tests that I discuss in the following paragraphs are from Doron and Heycock (1999), (2010), Alexopoulou, Doron and Heycock (2004) and Landau (2009, 2011).

One test that Doron et al. present to support their analysis of broad subjects is the coordination test, whereby an outer nominal is shared between two coordinated predicates. According to Doron et al., the outer nominal *my car* in the Arabic example (19a) below acts as a broad subject for the first clause *its colors are bright* and as a narrow subject for the second clause *open from the front*. The second predicate is an AP predicate that does not license null pronouns in Arabic and Hebrew. This means that there cannot be a null pronoun in the subject position before the AP. That holds for the Hebrew example in (19b) as well.

- (19) a. sayarat-i alwaan-u-ha zaahiyat-un wa maftoħat-un min
 car.fem-my color.pl-NOM-its bright-NOM and open.fem-NOM from
 al-amam
 the-front
 ‘My car, its colors are bright and [is] open from front.’

- b. ruti yeř la savlanut ve-maclixa be-pitron
 Ruti there-is to-her patience and-is-successful at-solving
 tasbecim
 cross.word.puzzles
 ‘Ruti, she has patience and is successful at solving crossword puzzles.’

[Doron and Heycock 1999: 77]

Landau argues against the grammaticality of the Hebrew example and suggests that the second conjunct is a predicate that lacks a subject and that can only be fixed by inserting an overt pronoun *hu* ‘it’ after the conjunction (Landau, 2009: 91). Nevertheless, I find the example from Standard Arabic grammatical and believe the coordination test offers strong support that outer nominals and inner nominals are in the same syntactic position.⁶¹ In other words, if preverbal

⁶¹ Although Standard Arabic is not the native language that I first acquired, I was exposed to the language as a child before school-age as it was the language used in all children TV programs and cartoons and was sometimes used as

nominals, the inner nominals in this construction, are acknowledged to be in a subject position, outer nominals must be acknowledged as subjects, accordingly. The difference between outer nominals and inner nominals are in the type of predicates they follow them, and in their base position prior to movement.

Another test in favor of the A-position analysis for broad subjects that Doron et al. employ is the occurrence of bare quantifiers as broad subjects. Landau describes this test as possibly “the strongest argument against the left-dislocation analysis” [2011, p. 133]. Bare quantifiers, such as *nobody* and *nothing* in English, are not allowed in clitic left-dislocated positions, at least in any studied language such as Italian and Greek. However, Doron et al. argue that bare quantifiers are completely acceptable in Arabic and Hebrew as shown in the Arabic example in (20).

- (20) wala waḥda jaṣr-ha taweel
 no one (sg.f) hair.sg-her long
 ‘No one has long hair’.

[Alexopoulou, Doron and Heycock 2004: 10]

A third test that Doron et al. employ to support their broad-subject approach is whether broad subjects can be embedded under auxiliary verbs.⁶² If they can, then they are not as peripheral as topicalized or left-dislocated nominals. In the following example, the broad subject *al-bait-u* ‘the house’ is embedded under the Arabic auxiliary verb *kaan* “was/were”:

- (21) kaan al-bait-u alwaan-u-hu zaahiyat-un (Standard Arabic)
 was the-house-NOM color.pl-NOM-its bright-NOM
 ‘The house was of bright colors.’

[Doron and Heycock 1999: 73]

the language of playing among children. The situation has changed nowadays as most children’s TV programs and cartoons use modern Arabic dialects instead of Standard Arabic.

⁶² This construction where a subject is embedded under the auxiliary verb *kaan* ‘can be translated as ‘it was the case that ...etc.’. So, starting the sentences with an auxiliary verb followed by a subject is not interpreted as a sentence in VSO order. Rather, the auxiliary verb agrees with a null expletive subject and is followed by a sentence in the SVO order. Aoun, Benmamoun and Choueiri (2010) provides this interpretation for the examples on outer nominal (p.236). More details are provided on this interpretation in section 6.3.2.

In response to Doron and Heycock (1999, 2010), Heycock and Doron (2003) and Alexopoulou, Doron and Heycock (2004), Landau (2009, 2011) specifically argues that the outer nominal in the DPS construction is not in an A-position [Spec, TP] but in an A-bar position above CP. In support of his arguments, Landau presents the distribution of outer nominals with respect to wh-phrases in Hebrew. He shows that outer nominals usually precede (22a), and never follow (22b), wh-phrases in Hebrew. In the following example, *ha-baxur* ‘the guy’ can only occur before the wh-phrase *le’an* ‘where’. This distribution is problematic for the broad-subject analysis because when the outer nominals are before wh-phrases, they are in a position above CP, in an A-bar position.

- (22) a. **ha-baxur** ha-ze, le’an amru lo lalexet?
 the-guy the-this where said.3.pl to.him to.go
 ‘This guy, where did they tell him to go?’
- b. *le’an **ha-baxur** ha-ze, amru lo lalexet?
 where the-guy the-this said.3.pl to.him to.go

[Landau, 2009: 97]

Landau attributes the ungrammaticality of the sentence in (22b) to wh-movement being blocked because the outer nominals themselves occupy the same A-bar position. Although this point is essential in the analysis of the outer nominals in the DPS construction in Hebrew, the situation in Arabic is different. There are structural differences between Standard Arabic and modern Arabic dialects, including Makkan Arabic, with regard to the distribution of outer nominals and wh-phrases. While Standard Arabic resembles Hebrew in having outer nominals only before wh-phrases, modern Arabic dialects accept outer nominals both before and after wh-phrases (I discuss the case of Arabic in section 6.3 below).

Landau’s view regarding the position of outer nominals is not new in the literature on Arabic syntax. Most linguists working on Arabic consider outer nominals (occurring in what I refer to as the double subject construction) to be typical examples of left-dislocation (Al-Azzawi, 1990; Aoun and Benmamoun 1998; Soltan, 2007; Al-Balushi, 2011, 2012, among others). Some argue that Arabic preverbal nominals (occurring in a regular single subject construction) are not

subjects, but are examples of left dislocation as well, and that the only subject in Arabic is postverbal (Al-Azzawi, 1990; Soltan, 2007; Al-Balushi, 2011, 2012).

In this dissertation, I adopt Doron et al.'s assumptions that the outer nominals in the DPS construction in Makkan Arabic are subjects rather than left-dislocated elements. However, I develop a new analysis of the position and derivation of preverbal subjects in Arabic, in which I suggest that the outer nominals in Makkan Arabic occur as specifiers of a SubjP that takes another SubjP as a complement. In other words, the SubjP projection can appear twice in a single sentence. I present this analysis in section 6.3.2 below, and in section 6.3.3, I propose a movement analysis to account for the derivation of the outer nominals in the DPS construction. This movement analysis goes against the proposed analysis of Doron et al. and Landau who all argue that such initial nominals are base-generated (More details are presented in section 6.3.2 below).

6.2.3 My proposed position: [Spec, SubjP]

In this section, I employ the order of outer nominals in the DPS construction with respect to wh-phrases to argue that there are two positions above TP which they may occupy. The outer nominals may occur in [Spec, TopP] before (above) wh-phases, or they may occur in [Spec, SubjP] after (below) CP. This distribution follows the hierarchy proposed by Landau (2009) of the canonical positions of preverbal subjects versus topics. For outer nominals to be subjects, they must occur after wh-phrases (23).

(23) [Dislocated DP [wh-phrase [Broad subject [Narrow subject]]]]

[Landau, 2009: 97]

Based on this hierarchy, Landau argues that the outer nominals in Hebrew, the so-called broad subjects, are not subjects because they can only occur in the Topic position before wh-phrases whereas the position after wh-phrases (in the TP area) is not available in Hebrew. The situation in Arabic is more complicated because Standard Arabic and modern Arabic dialects differ from each other. Recall that while Standard Arabic and Hebrew allow outer nominals to only occur before wh-phrases (in the Topic position), Arabic dialects allow nominals to occur before and

after wh-phrases. I turn now to consider the reason behind such structural differences in more detail.

In Standard Arabic, wh-phrases obligatorily trigger subject-verb inversion, meaning that wh-phrases must be adjacent to the verb. This is known as the adjacency constraint (Shlonsky 2000; Aoun, Benmamoun and Choueiri 2010). The following examples illustrate the effect of this constraint on the word order of subjects and verbs when preceded by the wh-phrase *maḏa* ‘what’.

- (24) a. *maḏa* *ʔaʃtara-t* *zainab*
 what bought.sg-F Zainab
 ‘What did Zainab buy?’
- b. * *maḏa* *zainab* *ʔaʃtara-t*
 what Zainab bought.sg-F
 ‘What did Zainab buy?’

[Aoun, Benmamoun and Choueiri, 2010: 205]

However, the adjacency constraint does not hold in Makkan Arabic. Accordingly, wh-phrases do not trigger subject-verb inversion, and both orders are acceptable as shown in (25).

- (25) a. *ʔeef* *ʔaʃtara-t* *zainab?*
 what bought.sg-F Zainab
 ‘What did Zainab buy?’
- b. *ʔeef* *zainab* *ʔaʃtara-t?*
 what Zainab bought.sg-F
 ‘What did Zainab buy?’

Other than triggering subject-verb inversion, the adjacency constraint is probably responsible for the fact that outer nominals in Standard can only occupy the position before wh-phrases. In other words, the outer nominals cannot appear in the middle position between the verb and wh-phrases. This may be attributable to the adjacency constraint that does not allow outer nominals to separate between verbs and wh-phrases as shown in (26):

(26) a. **naadya** mataa raʔaa-ha sami
 nadia when saw.sg.M-her sami
 ‘Nadia, when did Sami see her?’

b. *mataa **naadya** raʔaa-ha sami
 when nadia saw.sg.M-her sami
 ‘When Nadia, did Sami see her?’

[Aoun, Benmamoun and Choueiri 2010: 191]

In modern Arabic dialects, including Makkan Arabic, where the adjacency constraint does not hold, wh-phrases can appear before or after outer nominals in the DPS construction, as shown in (27).

(27) a. **naadya** meta ʃaaf-ha sami
 nadia when saw.sg.M-her sami
 ‘Nadia, when did Sami see her?’

b. meta **naadya** ʃaaf-ha sami
 when nadia saw.sg.M-her sami
 ‘When Nadia, did Sami see her?’

Following Landau’s hierarchy in (23) above, I analyze outer nominals occurring before wh-phrases as left-dislocated nominals and outer nominals occurring after wh-phrases as subjects.⁶³ This analysis is compatible with the analysis that I presented in Chapter 4 to distinguish between subjects and topicalized/left-dislocated nominals when co-occurring with wh-phrases. Recall from Chapter 4 that while modified indefinite nominals and bare negative quantifiers can occur in the preverbal position after wh-phrases, they are ungrammatical in the position before wh-phrases.

(28) a. leef **mahad** fehmi al-dars ams
 why nobody understand.perf.sg.m the-lesson.sg.m yesterday
 ‘Why didn’t anybody understand the lesson yesterday?’
 (Lit: why did nobody understand the lesson?)

⁶³ This conclusion raises questions regarding the status of preverbal subjects in Standard Arabic and Hebrew since outer nominals are only grammatical before wh-phrases. However, these inquiries are outside the scope of the current dissertation that only addresses the clause structure and subject position of Makkan Arabic.

- b. ***maḥad** leef fehmi al-dars ams
 nobody why understand.perf.sg.m the-lesson.sg.m yesterday
- (29) a. leef **bent** ṣaḡeera te-nam mot?axer
 why girl.sg.f little 3.f-sleep.imperf late
 ‘Why does a little girl sleep late?’
- b. ***bent** ṣaḡeera leef te-nam mot?axer
 girl.sg.f little why 3.f-sleep.imperf late

Similarly, outer nominals can be bare negative quantifiers and modified indefinite nominals, but these categories cannot appear before *wh*-phrases. More specifically, the bare negative nominal *maḥad* can occur as an outer nominal in a DPS construction, followed by a sentential predicate. The sentential predicate in (30a) is a copular sentence with the resumptive clitic attached to the inner nominal. Alternatively, *maḥad* can precede an SVO or VSO sentence (30b) and (30c). The bare negative nominal *maḥad* is when it followed by a verbal predicate, and the resumptive clitic is in object position, as shown in (30d).

- (30) a. maḥad ṣen-o zarga
 nobody eye-his blue.F
 ‘Nobody has blue eyes.’ (Literally: Nobody, his eye is blue)
- b. maḥad ṣen-o bakat gad-ha
 nobody eye-his cried.3.sg.M as much as her
 ‘Nobody cried as much as her’.
- c. maḥad bakat ṣen-o gad-ha
 nobody cried.3.sg.M eye-his as much as her
 ‘Nobody cried as much as her’.
- d. maḥad semʃt-o yegol keda
 nobody I heard-him say.3.sg.M that
 ‘I did not hear anybody say that’

While outer nominals in Makkan Arabic can occur before or after *wh*-phrases, as indicated above, the bare negative quantifiers can only occur after *wh*-phrases not before as shown in (31).

(31)a. leef **mahad** ʕen-o zarga
 why nobody eyesg.f-3.sg.m blue.sg.f
 ‘Why doesn’t anybody have blue eyes?’ (Literally: why nobody, his eye is blue?).

b. ***mahad** leef ʕen-o zarga
 nobody why eyesg.f-3.sg.m blue.sg.f

Additionally, modified indefinite nominals can occur in the subject position after wh-phrases but not before them in the left-dislocation position.

(32)a. keef **bent** marra samra ʕen-ha zarga
 how girl.sg.f very dark-skinned.sg.f eyesg.f-3.sg.f blue.sg.f
 ‘How does a very dark-skinned girl have blue eyes?’
 (Literally: How a very dark-skinned girl, her eyes are blue?)

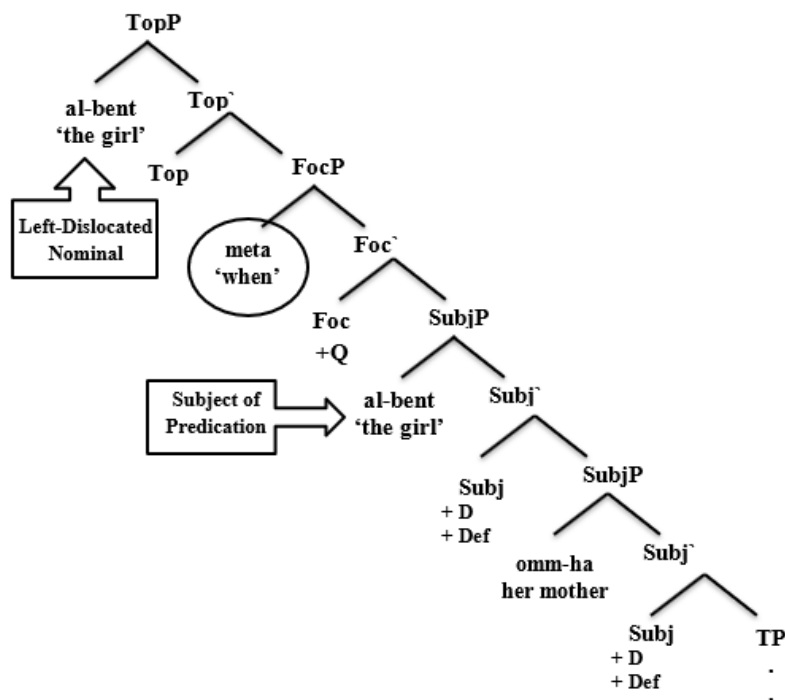
b. ***bent** marra samra keef ʕen-ha zarga
 girl.sg.f very dark-skinned.sg.f how eyesg.f-3.sg.f blue.sg.f

I argued in Chapter 4, based on Rizzi (1997), that wh-phrases occupy [Spec, FocP] and that nominals in the position above wh-phrases occupy [Spec, TopicP] whereas the nominals below wh-phrases are located in the FinP which represents the TP area (see the review of Rizzi’s proposal in Chapter 2). According to Rizzi’s (1997) division of the CP domain and Landau’s (2009) hierarchy of outer nominals co-occurring with wh-phrases, I assume that the position before wh-phrases is occupied by left-dislocated nominals while the position after wh-phrases is reserved for subjects. Accordingly, I argue that nominals that appear before wh-phrases are topics or left-dislocated nominals while nominals occurring after wh-phrases are subjects. The two relevant orders in (33a) and (33b) are illustrated in (33c) which shows the positions in which the outer nominals can occur.

(33)a. al-bent meta ʔom-**ha** jaa-t
 the-girl.sg.F when mother.sg.F-her came.sg-F
 ‘The girl, when did her mother come’

b. meta al-bent ʔom-**ha** jaa-t
 when the-girl.sg.F mother.sg.F-her came.sg-F
 ‘When did the girl’s mother came’

C.



Based on this analysis, and adopting Cardinaletti's (1997, 2004) SubjP projection, I show that the categories of bare negative quantifiers and modified indefinite nominals cannot be left-dislocated unlike other categories of nominals (such as definite nominals). I suggest that nominals, except bare indefinite nominals, can undergo movement from lower subject and non-subject positions to preverbal position in [Spec, SubjP]. When these nominals are bare negative quantifiers and modified indefinite nominals, they are unable to undergo further movement to [Spec, TopP].⁶⁴

Before I turn to discuss the derivation of the DPS construction in Makkan Arabic, I add one last point regarding the position of outer nominals in [Spec, SubjP]. Suggesting that outer nominals in the DPS construction in this chapter occupy [Spec, SubjP] is in line with my proposed position for preverbal subjects in Chapter 4 and 5, which provides a unified analysis of preverbal subjects in Makkan Arabic. However, unlike preverbal subjects discussed in the

⁶⁴ Under this analysis, left-dislocated nominals are derived by movement. However, they can also be derived by base-generation. Both types of left-dislocation are discussed in Aoun and Benmamoun (1998), summarized in 6.3.1 below. As for outer nominals, I argue in section 6.3.2 against base-generation in favor of a movement analysis, and I posit that the obligatory resumptive clitics in the DPS construction are a result of movement.

previous chapters which are followed by verbal (34a) or non-verbal predicates (34b), outer nominals in [Spec, SubjP] projection are followed by a predication sentence in VSO (34c) or SVO order (34d).

- (34) a. al-bent **jaa-t**
 the-girl.sg.f came.perf.3.sg.f
 ‘The girl came’.
- b. al-bent **helwa**
 the-girl.sg.f beautiful.sg.
 ‘The girl (is) beautiful’.
- c. al-bent **jaa-t** **omm-ha**
 the-girl.sg.f came.Perf.3.sg.f mother.sg-3.sg.f
 ‘The girl, her mother came (Lit. The girl, came her mother)’.
- d. al-bent **omm-ha** **jaa-t**
 the-girl.sg.f mother.sg-3.sg.f came.perf-3.sg.f
 ‘The girl, her mother came.’

According to the analysis that I propose, the outer nominals in (34d) occupy the specifier position of a SubjP projection and take another SubjP as their complement. The outer nominals and the inner nominals, in examples such as (34d), occupy the specifier positions of two SubjP projections. According to this analysis, the entire lower SubjP including its preverbal inner nominal, is a predication clause of the outer nominal. This analysis goes against the multiple-specifier analysis suggested by Doron and Heycock (1999) in which outer nominals (broad subjects) and inner nominals (narrow subjects) both occupy a recursive specifier position in [Spec, TP]. In this chapter, I do not assume that outer nominals occupy a second specifier position of the same SubjP projection.

In case of inner nominals staying in situ in [Spec, vP], as in (34c), the predication clause is a TP, not a SubjP, which means that there is only one SubjP with the outer nominal in its specifier position (See chapter 3 for more details on the derivation of VSO sentences). Having discussed the position of outer nominals in the DPS construction, I now turn to the derivation of these nominals to form a double-subject construction.

6.3 Derivation of the outer nominals

I begin this section by first presenting the previous analyses of the derivation of outer nominals in the DPS construction, the majority of which involve base-generation. I argue against the assumptions underlying these analyses and suggest that these nominals are derived by movement. I also discuss the association between the movement approach that I adopt and the resumption that is involved in the DPS construction.

6.3.1 Aoun and Benmamoun (1998): Clitic left-dislocation in Lebanese Arabic

One of the earliest works that addresses the DPS construction in Arabic is Aoun and Benmamoun (1998) who consider this construction as an example of clitic left dislocation (CLLD). Aoun and Benmamoun argue that CLLD in Lebanese Arabic should be divided into two types; one that is derived by movement, and another that is base-generated. Their observation is based on three factors: the position of the resumptive pronouns inside or outside islands, the interaction of the construction with *wh*-phrases and finally the evidence from reconstruction effects. According to Aoun and Benmamoun, the relation between the left-dislocated NPs and their clitics can violate island constraints in Lebanese Arabic.⁶⁵ That is, the resumptive clitic can occur inside islands such as an adjunct island (35a), a complex NP island (35b), and a *wh*-island (35c).

- (35) a. *smeʕt ʔnno naadya rħħt (men-duun-ma teħke maʕ-a)*
 heard.Isg that Nadia left.2sM without COMP talking.2sg with-her
 'I heard that Nadia, you left without talking to her.'
- b. *smeʕt ʔnno ha-l-kteeb ħkiit maʕ 1-walad (yalli katab ʕal-ee).*
 heard.I.sg that this-the-book talked.2.sg.M with the-boy who wrote.3sM on-it
 'I heard that this book, you talked with the boy who wrote on it.'
- c. *smeʕt ʔnno naadya byaʕrfo (ʔayya walad jeef-a)*
 heard.I.sg that Nadia know.3p which boy saw.3sM-her
 'I heard that Nadia, they know which boy saw her.'

[Aoun and Benmamoun, 1998: 571-572]

⁶⁵ I preserve the terminology employed by Aoun and Benmamoun (1998). Thus, I refer to the outer nominals in the DPS construction as (clitic) left-dislocated NPs while presenting Aoun and Benmamoun's (1998) argument.

Aoun and Benmamoun assume that when there are no island effects, clitic left-dislocated NPs must be base-generated. Nevertheless, the CLLD construction in Lebanese Arabic also shows a reconstruction effect, which is evidence for movement. In (36a), the pronoun within the CLLDed NP *Talmiiz-a ffitaan* ‘her naughty student’ can be interpreted as bound by the quantifier phrase (QP) *koll mfallme* ‘every teacher’. Bound pronouns must be c-commanded at LF by the elements that bind them. The phrase containing the bound pronoun has been reconstructed to a position where it can be c-commanded by the subject QP. The pronoun in *Talmiiz-a ffitaan* ‘her naughty student’ in (36b) cannot be interpreted as bound by the QP because extraction from an island, such as the adjunct island shown in (36b), is not possible.

(36) a. **talmiiz-a ffitaan** btaʕrfo ʔenno koll mfallme ʔaasaset-o
 student-her the-naughty.M.sg know.2.p that every teacher.F punished.3sF-him
 'Her naughty student, you know that every teacher punished him.'

b. ***talmiiz-a ffitaan** fallayto ʔabl-ma koll
 student-her the-naughty.M.sg left.2.p before every

mfallme tʔaasaset-o
 teacher.F.sg punished.3.sg.F-him

'Her naughty student, you left before every teacher punished him.'

[Aoun and Benmamoun, 1998: 580]

These data collectively lead Aoun and Benmamoun to propose the existence of two types of CLLD. One type of CLLD, which I call CLLD-1, is derived by movement, shows reconstruction effects and is always sensitive to island constraints. The other type, which I call CLLD-2, is base-generated and violates island constraints. According to this perspective, the examples that do not involve islands are ambiguous. Aoun and Benmamoun (1998) state that “CLLD constructions that do not involve islands could actually correspond to two different representations: one where the clitic is coindexed with a lexical NP that can later undergo movement, and another where the clitic is coindexed with a null pronominal that is related to a base-generated CLLDed NP” (p. 579).

The two types of CLLD behave differently when they interact with wh-phrases. Recall from section 6.2.3 above that modern Arabic dialects allow outer nominals (CLLDed nominals in

Aoun and Benmamoun's terms) to appear before and after wh-phrases. Aoun and Benmamoun explain that left-dislocated NPs display different behaviors with respect to wh-phrases. When the left-dislocated NP is not separated from its clitic by an island, thus belonging to CLLD-1 that is derived by movement, the wh-phrases can move across the left-dislocated NP to appear in a clause-initial position as shown in (37a). However, a wh-phrase cannot move across a fronted NP whose clitic is inside an island, or CLLD-2 in other words, as shown in the ungrammatical example in (37b) where the left-dislocated NP 'Nadia' is separated from its clitic by a complex NP island. Instead, NPs of type CLLD-2 always appear before the wh-phrase.⁶⁶ So, CLLDed NPs are distributed differently when co-occurring with wh-phrases. CLLD-1 appears after wh-phrases while CLLD-2 appears before wh-phrases.

(37) a. *fu naadya xabbaruw-a?* (CLLD-1)
 what Nadia told.3p-her
 'What Nadia, did they tell/(told) her?'

b. **fu naadya xabbaro şşabe yalli jeef-a?* (CLLD-2)
 what Nadia told.3p the-boy that saw.3sg.M-her
 'What Nadia, did they tell the boy who saw her?'

[Aoun and Benmamoun 1998: 580]

Aoun and Benmamoun's study presents significant diagnostic tests that I employ in my analysis of the derivation of outer nominals in the DPS construction. Recall that outer nominals in Makkan Arabic may appear before or after wh-phrases. I proposed in section 6.2.3 above that nominals after the wh-phrase are subjects that occupy [Spec, SubjP] position whereas nominals before wh-phrases are left-dislocated nominals that occupy [Spec, TopicP] position. To support this proposal, I showed that modified indefinite nominals and bare negative quantifiers (the two categories that do not usually get left-dislocated or topicalized) can appear in the subject position after wh-phrases but cannot appear in topic position before wh-phrases. Although my conclusions on the position of outer nominals is based on the categories that appear before and after wh-phrases, Aoun and Benmamoun's study provides further insights into my analysis. By

⁶⁶ Aoun and Benmamoun (1998) do not provide an example that shows the grammatical version of (16b) where the clitic-left-dislocated NP appears before the wh-phrase.

employing the island sensitivity constraint, Aoun and Benmamoun propose that the nominals before wh-phrases are base-generated in that position because these nominals violate island constraints. Nominals appearing after wh-phrases are derived by movement because they are sensitive to island constraints.⁶⁷ By employing Aoun and Benmamoun's diagnostics, I argue in section 6.3.2 and 6.3.3 below that outer nominals are better analyzed as being derived by movement not by base-generation. This proposal is against the base-generation approach suggested by Doron et al. as I will explain in section 6.3.2 below.

6.3.2 Against base-generation

According to the assumptions of Doron and Heycock (1999, 2010), Alexopoulou, Doron and Heycock (2004) and Landau (2009, 2011), the outer nominals in the DPS construction are derived by base-generation. Doron et al. differentiate between broad subjects (outer nominals) and narrow subjects (inner nominals) based on how they are derived. Narrow subjects are base-generated in VP then move to [Spec, TP] position. Thus, narrow subjects are the arguments that interact with the verb, and they are derived by movement from a lower lexical projection to [Spec, TP]. However, broad subjects are base-generated into that "recursive" [Spec, TP] position and "do not form a chain with a trace within VP" (Doron and Heycock, 1999: 77). Since broad subjects are always base generated in [Spec, TP], they are always insensitive to island constraints as they can be separated from their clitics by an island.

The main evidence that Doron and Heycock (1999) employ to support the base-generation approach in the derivation of the outer nominals in the DPS construction is the lack of agreement between these nominals and the main verb. Doron and Heycock show that only narrow subjects agree with the verb (38a) while broad subjects do not (38b). In (38a), the verb *yu-qabil-un-a* 'they meet' agrees with the narrow plural subject *aTTulab-u* 'students' while the broad subject *hind-un* 'Hind' in (38b) does not agree with the verb *yu-qabil-u* 'meet'.

⁶⁷ Aoun and Benmamoun (1998) employ the reconstruction effect to argue that nominals after wh-phrases are derived by an A-bar movement. In this dissertation, I do not attempt to reconcile their analysis with my proposal that the position after wh-phrases is occupied by subjects that are derived by an A-movement. The data is too complex to be treated within the scope of this dissertation. More research needs to be done in this regard.

(38) a. at-ṭulab-u yuqabilu-una hind-an
 The-students.M-NOM meet.3.M-pl. Hind-ACC
 ‘The students are meeting Hind’

 b. hind-un yuqabilu-ha at-ṭulab-u
 Hind-NOM meet.3.M-her the-students-NOM
 ‘Hind, the students are meeting her’

[Doron and Heycock, 1999: 77]

Doron and Heycock suggest that this lack of agreement between the outer nominals and the verb is evidence that broad subjects are base-generated rather than derived by movement. They account for the agreement facts by using Chomsky’s (1995) proposal that base-generated elements in a specifier position cannot check features of that head. Accordingly, broad subjects, which are base-generated in [Spec-TP], cannot check agreement features.

Based on a more recent version on Chomsky’s minimalism (2005), I account for the lack of agreement between outer nominals and the head T to the assumptions of Agree relation. In the Agree-based model of minimalism, the relation Agree is established between the head T and the inner nominals. However, outer nominals do not establish an Agree relation with T in their first-merged positions. Direct objects, for example, establish an Agree relation with the head v only, which results in valuing the accusative Case on the object nominal. However, there is no agreement relation between the head T and the object nominals (i.e. the outer nominals after movement to [Spec, SubjP]), which explains why outer nominals do not agree with the verbs (For more details on the Case valued on outer nominals after movement, refer to section 6.3.3.1 below). The agreement relation is only established between the head T and the inner nominals in their first-merged position in [Spec, vP] where they are directly c-commanded by T (See section 2.2 for more details on the Agree model).

Returning to the arguments against the base-generation approach in accounting for the derivation of outer nominals in the DPS construction, recall from section 6.2.3 that when outer nominals are separated from their resumptive clitic by an island, they must appear before a wh-phrase (39a). Doron and Heycock (2010) account for the ungrammaticality of sentences such as (39b) by suggesting that broad subjects create islands that block movement of wh-phrases to a

preceding position. However, Doron and Heycock do not account for sentences like (39a) where the base-generated broad subject occurs before a wh-phrases, in an A-bar position.

- (39) a. **naadya** ʔeef galo li al-wald ʔelle ʃaaf-ha
 nadia what said.p.M to the-boy.sg that saw.sg.M-her
 ‘Nadia, what did they tell the boy who saw her?’
- b. *ʔeef **naadya** galo li al-wald ʔelle ʃaaf-ha
 what nadia said.p.M to the-boy.sg that saw.sg.M-her
 ‘What Nadia, did they tell the boy who saw her?’

I argued in Chapter 4 and in this chapter (section 6.2.3) that the position before wh-phrases is for left-dislocated elements while the position after wh-phrases is for subjects (See Chapter 4 for more details on the distribution of subjects and left-dislocated nominals). The outer nominals that appear after wh-phrases (in the subject position) show sensitivity to island constraints since they cannot be separated from their resumptive clitics by an island.

- (40) a. ʔeef **naadya** galo la-ha
 what nadia said.p.M to-her
 ‘Nadia, what did they tell her?’
- b. *ʔeef **naadya** galo li al-wald ʔelle ʃaaf-ha
 what nadia said.p.M to the-boy.sg that saw.sg.M-her
 ‘Nadia, what did they tell the boy who saw her?’

These examples show that the outer nominals which occur after wh-phrases (in the subject position) cannot be base-generated since base-generated nominals do not show sensitivity to island constraints. Aoun, Benmamoun and Choueiri (2010) present a second piece of evidence against the base-generation approach proposed by Doron et al. for the derivation of outer nominals. The base-generated outer nominals in the DPS construction (which can violate island constraints and can be separated from their clitics by an island) cannot be embedded under the auxiliary verb *kaan* ‘it was’ (41b). Outer nominals can be embedded under the auxiliary verb only when they show sensitivity to island constraints as in (41a). By contrast, outer nominals cannot be embedded under auxiliary verbs when they violate island constraints as in (41b). Recall that embedding under the auxiliary verb *kaan* is one of the diagnostic tests employed by

(41)a. kanat nadia sami ye-kallem-ha kol-yom
was.3.f Nadia Sami 3.M-talking with.sg-her everyday
'It was the case that Nadia, Sami is taking with her everyday.'

- [Aoun, Benmamoun and Choueiri, 2010: 236]

(42)a. maḥad fogat-o fadyaa
nobody apartment-his available
'(There is) nobody whose apartment is available.'

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According to the base-generation approach proposed by Doron et al., outer nominals are subjects that are base-generated in their clause-initial position. To argue for the subjecthood of outer nominals, Doron et al. suggest that these nominals can be embedded under auxiliary verbs and can be bare negative quantifiers. However, the data in this section provides evidence that base-generated outer nominals (which violate island constraints) cannot be bare negative quantifiers and be embedded under auxiliary verbs. Additionally, I argued that base-generated outer nominals cannot appear after *wh*-phrases (which I argued to be a subject position) but can only appear before *wh*-phrases (which I argued to be a topic position). In this section, I have shown that base-generation cannot account for the derivation of outer nominals in the DPS construction since base-generated outer nominals cannot occur after *wh*-phrases (in the subject position), be embedded under the auxiliary verb *kaan* and be a bare negative quantifier *maḥad*.

In the following section, I propose that the outer nominals in the DPS construction undergo movement from lower non-subject positions. Adopting a movement approach to account for the derivation of outer nominals in the DPS constructions and their resumptive clitics provides an alternative analysis of the base-generation approach. The movement analysis accounts for why outer nominals can occur only after *wh*-phrases, be embedded under auxiliary verb, and be bare negatives.

6.3.3 Towards a movement approach

I argue in this section that nominals move from their lower non-subject positions to [Spec, SubjP] to satisfy the uninterpreted SoP feature on the head Subj, which can take another SubjP projection as its complement resulting in a double-subject construction. This suggestion follows from my proposal in Chapter 4 that subject nominals can move from their first-merged position in [Spec, vP] to a [Spec, SubjP] to form an SVO sentence.

In this section, I discuss the major aspects and restrictions of the movement analysis that I propose for the derivation of the outer nominals in the DPS construction. I address the issue of Case since these nominals already bear accusative or genitive Case depending on their base position in the clause structure. Since I suggest that two nominals, or more, may undergo

6.3.3.1 The problem of Case

(43)a. al-bent nam-at
the-girl.sg.f sleep.perf-3.sg.f
'The girl slept.'

b. **hya** nam-at
she sleep.perf-3.sg.f
‘she slept.’ (Subject Pronoun)

(44)a. zor-t al-bent
visit.perf-1.sg the-girl.sg.f
'I visited the girl.'

b. **zor-t-ha** (Object of verb)
visit.perf-1.sg-**her**
'I visited her.'

(45)a. roht li-al-bent
go.perf-1.sg to-the-girl.sg.f
'I went to the girl.'

b. roht li-**ha** (Object of preposition)
go.perf-1.sg to-**her**
'I went to her.'

(46)a. da galm al-bent
 this pen.sg.m the-girl.sg.f
 ‘This is the girl’s pen.’

b. da galm-**ha**
 this pen.sg.m-**her**
 ‘This is her pen.’

Nominals bearing accusative or genitive Case can undergo movement to a clause-initial position forming the DPS construction. By adopting the movement approach, I suggest that the outer nominal in an example like (47a) below undergoes movement from the object position to [Spec, SubjP], and that this movement is derived by the SoP feature on the head of the SubjP.⁶⁸ As shown in (47b), the outer nominal appears in subject pronominal form although the nominal has its accusative Case feature valued in its base-position through Agree with v. Thus, nominative Case overrides accusative structural Case since the outer nominal appears in the subject (nominative) pronominal form.

(47)a. **al-bent** ana zor-t-ha
 the-girl.sg.f 1.sg visit.perf.1.sg-3.sg.f
 ‘The girl, I visited her.’

b. **hya** ana zor-t-ha
 3.sg.f 1.sg visit.perf.1.sg-3.sg.f
 ‘She, I visited her.’

Having established that the outer nominals receive nominative Case after movement to preverbal subject position, the next question that needs to be addressed is where nominals get nominative Case from. According to the Agree model adopted in this dissertation, nominative

⁶⁸ There are two points to be observed here. First, Although I adopt a derivational approach, I do not assume that objects have to move through [Spec, vP]. This movement was necessary in older versions of minimalism in which nominals are checked for Case feature only in specifier positions. However, in the recent version of the theory, which is the one I adopt in this dissertation, Case features are valued as a result of Agree while nominals stay in situ. Second, I adopt the phase theory, but I raise questions about vP as a phase in Arabic since I suggest that the head Asp provides the templatic pattern for spelling out the verbs. Another reason for questioning vP as a phase in Arabic is that objects are accessible by higher heads higher than vP.

Case feature is valued on subjects as a reflex of Agree. An Agree relation is established between T and the subject which results in valuing the nominative Case feature on subject nominals. The Multiple Agree relation, which is proposed for the double nominative construction in Japanese by Hiraiwa (2001) does not work for Makkan Arabic. In deriving multiple nominative nominals in Japanese, the head T simultaneously probes down for more than one nominal goal. However, Multiple Agree does not work for Makkan Arabic because there is no agreement relation between the outer nominals and T, unlike in Japanese where there is agreement. The agreement relation is only established between the head T and the inner nominal that is directly C-commanded by T (See section 2.2 for more details). Thus, nominative Case on the outer nominals is not a structural case that is a reflex of Agree. Instead, I argue below that there is nominative Case valuation in the SubjP projection in Makkan Arabic.

Following Chomsky (2005), Fassi Fehri (2005), Ouali (2008) and Musbahien (2008), I assume that the head C is the source of tense, Case, and phi-features. However, I diverge from Chomsky (2005) and Fassi Fehri (2005) who maintain that all the features are transmitted from the head C to be valued on T. Instead, I follow Ouali (2008) and Musbahien (2008) in assuming that not all features are transferred to T, and that a lexical Case feature is copied from C to be valued on another functional head, such as Top in Topic Phrases. Musbahien suggests that the head C has the option of keeping features to be valued directly by C, transferring features to T or copying features to be valued on another functional head. Musbahien proposes the existence of a lexical nominative Case (as opposed to a structural Case that results from Agree relation). “I assume that C transfers its features to T, but only certain C's have an extra lexical Case feature which is not interpretable on T, therefore such a feature is not transferred” [Musbahien, 2008: 125]. My suggestion that there is Case assignment in the SubjP projection diverges from Cardinaletti's (2004) original model in which she suggests that there is no Case assignment in the SubjP projection, and nominals preserve their accusative/dative Case in this subject position (See Chapter 3 for more information on Cardinaletti's proposal).

In the following section, I discuss the nature of the movement of non-subject nominals to [Spec, SubjP] in more detail. I address the situation in which more than one nominal undergoes

movement and specify the structural constraints that apply to movements in the derivation of the DPS construction.

6.3.3.2 Intersecting movements

In the DPS construction, there are two preverbal argument nominals because the outer nominal is followed by an SVO sentential predicate. Recall that I proposed that SVO order is derived by the verb moving from *v* to *T* and the thematic subject moving from [Spec, *v*P] to [Spec, SubjP], passing through [Spec, AspP] and [Spec, TP] to satisfy the SoP feature on the head Subj. In addition to this movement, non-subject nominals such as objects and possessors may undergo movement to the specifier position of a second SubjP, to satisfy another SoP feature on the second head Subj. I refer to both types of movement as subject movement because nominals move to a higher subject position in SubjP projection. Note that the movement from lower subject and non-subject positions is optional and is motivated to value the uninterpreted uSoP feature on the head of SubjPs. Subject movement is syntactically constrained by the Shortest Move principle, as I will explain below on page 234. I first illustrate the different word order available for the DPS construction then I present the analysis that I suggest for these structures and the constraints on movement.

In Makkan Arabic, there are various positions available for nominals, as indicated earlier. The example in (48a) shows a VSO sentence where the subject and object both appear after the verb. In (48b), the subject appears in a preverbal position whereas in (48c), only the object appears preverbally. Finally, both the subject and the object appear in preverbal positions in (48d). Note that in (48c) and (48d), an obligatory resumptive clitic is attached to the verb.

- (48) a. aftra-t al-bent al-fostan VSO
 buy.perf.3.sg.f the-girl.sg.f the-dress.sg.m
 ‘The girl bought the dress.’
- b. al-bent aftra-t al-fostan SVO
 the-girl.sg.f buy.perf.3.sg.f the-dress.sg.m
 ‘The girl bought the dress’

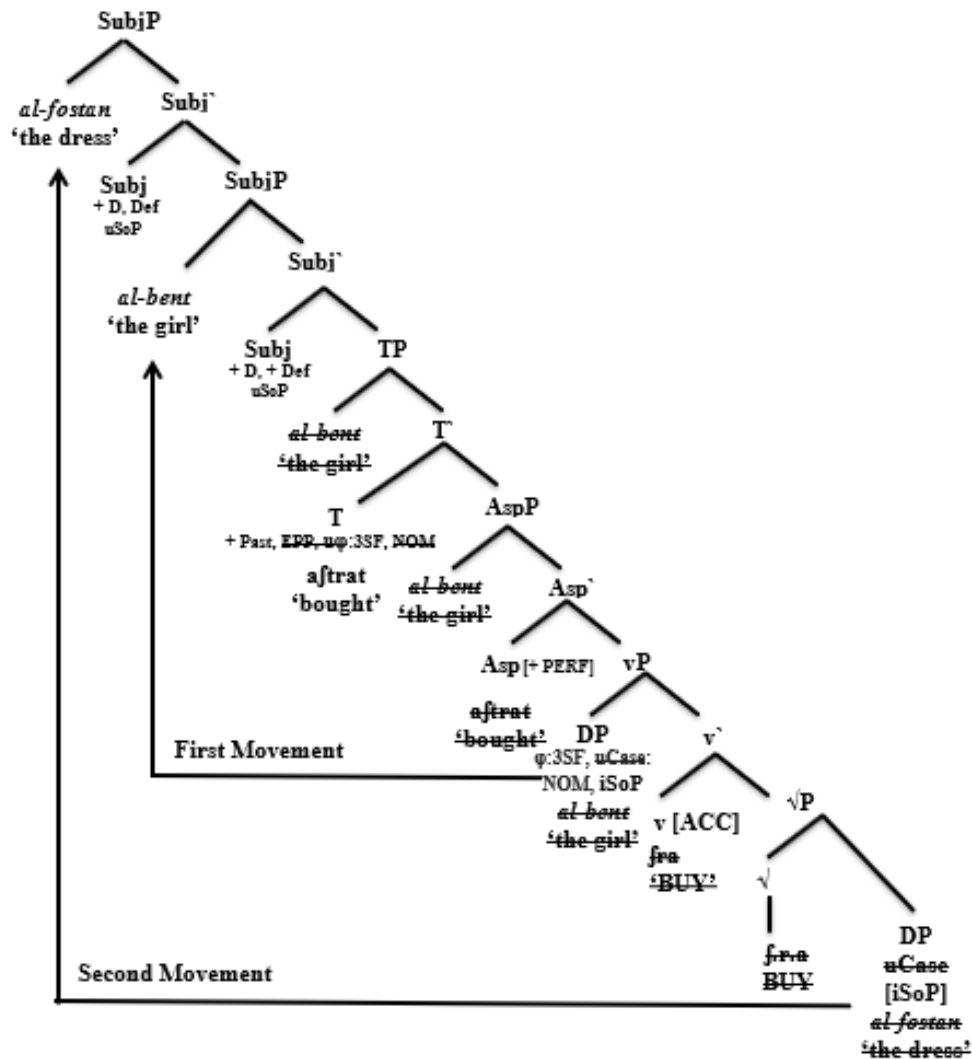
- c. al-fostan a]tra-t-o al-bent DP_{outer} + (V+cl S)
 the-dress.sg.m buy.perf.3.sg.f -3.sg.m the-girl.sg.f
 ‘The dress, the girl bought it.’
- d. al-fostan al-bent a]tra-t-o DP_{outer} + (SV+cl)
 the-dress.sg.m the-girl.sg.f buy.perf.3.sg.f -3.sg.m
 ‘The dress, the girl bought it’

Note that in example (48d), there are two nominals that appear preverbally, *al-fostan* ‘the dress’ then followed by *al-bent* ‘the girl’ in this specific order. The opposite order in which *the girl* appears first then *the dress* yields an ungrammatical sentence in Makkan Arabic (49).

- (49) *al-bent al-fostan a]tra-t-o
 the-girl.sg.f the-dress.sg.m buy.perf.3.sg.f -3.sg.m

To derive the sentence in (48d) with two preverbal nominals, I suggest that both nominals undergo subject movement to [Spec, SubjP] position to satisfy the SoP feature on the head Subj, and this movement is constrained by the Shortest Move principle (See section 2.6.2 for details on the Shortest Move principle). The head Subj carries the uninterpreted uSoP feature and probes down for the closest nominal that carries the iSoP feature. Thus, *the girl* moves first from the thematic subject position in [Spec, vP] to the first (lower) specifier position of SubjP, as illustrated in (50). This movement is successive as it passes through the specifier positions of AspP and TP. Then the head Subj of the second (higher) SubjP probes down for another nominal that carries the iSoP feature, so *the dress* moves to a second (higher) specifier position of another SubjP. In this way, *the girl* moves first to the closer [Spec, SubjP] then *the dress* moves to the next available [Spec, SubjP] position. If *the dress* moves first to the lower specifier position and *the girl* moves next, the resulting sentence is ungrammatical as shown in (50).

(50)



One last point that must be considered here is that the subject can stay in situ and only the object can move to a [Spec, SubjP] position, as in (48c) above, repeated below for convenience.

- (51) al-fostan aftra-t-o al-bent
 the-dress.sg.m buy.perf.3.sg.f -3.sg.m the-girl.sg.f
 'The dress, the girl bought it.'

The subject *the girl* stays in situ because it does not carry the iSoP feature, so it is not motivated to move to a higher subject position (reflecting the speaker's desire to communicate that the role of *the girl* is not prominent in the context conveyed by the sentence). The object *the dress* carries the iSoP feature which motivates the object nominal to move to interpret the uSoP on the head

Subj. The Shortest Move principle does not apply because it cannot force a nominal that does not bear the iSoP feature to undergo subject movement. Another important observation in example (51) is that although [Spec, TP] and [Spec, AspP] are available (since the thematic subject stays in situ and does not go through these specifier positions), the object *the dress* moves directly to [Spec, SubjP] without passing through any specifier positions. A supporting evidence for this observation is that there is no resumptive copy in these positions of the moved object that can be spelled out.

- (52) *al-fostan hwa aʃtra-t-o al-bent
 the-dress.sg.m 3.sg.m buy.perf.3.sg.f -3.sg.m the-girl.sg.f
 ‘The dress, it, the girl bought it.’

It can be concluded from these observations that although thematic subjects undergo successive movement that passes through the specifier positions of AspP and TP, when objects move to preverbal subject position, the movement is direct and skips available specifier positions. I suggest that subjects go through these specifier positions to satisfy the Shortest Move principle which obliges subjects to move only to the next available specifier position. However, these specifier positions are blocked for the moved objects (and possessors) because these non-nominative nominals will interfere with the transmission of nominative Case to the subject which is valued as a side-effect of Agree. The case transmission of nominative Case can be interrupted by nominals carrying a non-nominative Case (e.g. accusative or genitive). To sum up, the Shortest Move principle applies on subject movement if there is no clash in Case.

6.3.3.3 Possessor extraction in Makkan Arabic

In Arabic, possessors are usually constituents of the construct state (or genitive constructions). Construct states are composed of an indefinite possessee followed by the definite possessor which is assigned genitive Case. Like nominals, construct states (the possessee and the possessor) can occupy subject positions (53a) or object positions (53b).

- (53) a. **abu** **al-bent** jaa
 father.sg.m the-girl.sg.f come.perf-3.sg.m
 ‘The girl’s father came.’
- b. jof-t **abu** **al-bent**
 see.perf-1.sg father.sg.f the-girl.sg.f
 ‘I saw the girl’s father.’

Cross-linguistically, possessors are not always allowed to move out of the genitive construction (Gavruseva, 2000). Gavruseva explains that separating a nominal or prepositional possessor phrase from the possessed nouns by movement is not allowed in Germanic languages (e.g. English and Dutch) but allowed in languages as Hungarian and Chamorro. Wang (2005) further explains that some languages allow possessor extraction only from certain positions in the sentence. For example, possessor extraction is allowed in Mandarin Chinese only when the possessor phrase is in the subject position. When it is in the object position, a resumptive pronoun is obligatory to license the movement.

In Makkan Arabic, possessors are allowed to move out of their genitive constructions. For example, the possessor *al-bent* ‘the girl’ in (54) can move out of the genitive construction leaving behind the indefinite nominal *abu* ‘a father’ with a pronominal clitic attached. The sentences in (54) exemplify the DPS construction in which the outer nominal *the girl* is followed by a sentential predicate. Note that in (54a), the outer nominal *the girl* is followed by an SVO sentence in which the subject *her father* appears before the verb. It is also possible to have *her father* in a postverbal position as shown in (54b) below.

- (54) a. **al-bent** abu-**ha** jaa
 the-girl.sg.f father.sg.m-3.sg.f come.perf-3.sg.m
 ‘The girl, her father came.’
- b. **al-bent** jaa abu-**ha**
 the-girl.sg.f come.perf-3.sg.m father.sg.m-3.sg.f
 ‘The girl, her father came.’

The genitive construction in (54) is in subject position, whether in preverbal or postverbal. It is also possible that the genitive construction occupies the object position in (55).

- (55) **al-bent** *ʃof-t* **abu-ha**
the-girl.sg.f see.perf-1.sg father.sg.f-3.sg.f
‘The girl, I saw her father.’

Note that the outer nominal *the girl* in (55) is followed by a predication sentence that overtly lacks its subject, which can be recovered by agreement on the verb *ʃof-t* ‘I saw’. In this predication sentence *I saw her father*, the object *her father* can also appear in a clause-initial position but only after *the girl*, and it has to be co-indexed with resumptive clitic attached on the verb (56a). The opposite order of the two outer nominals where *her father* appears first is ungrammatical in Makkan Arabic (56b).

- (56) a. **al-bent** **abu-ha** *ʃof-t-o*
the-girl.sg.f father.sg.m-3.sg.f see.perf-1.sg-3.sg.m
‘The girl, her father, I saw him.’
b. ***abu-ha** **al-bent** *ʃof-t-o*
father.sg.m-3.sg.f the-girl.sg.f see.perf-1.sg-3.sg.m
‘Her father, the girl, I saw him.’

I argue that genitive possessors in Makkan Arabic can undergo movement from their non-subject position to a preverbal subject position in [Spec, SubjP] to satisfy the uSoP feature on the head Subj. This subject movement of genitive possessors follow the same movement constraints attested when objects undergo movement to [Spec, SubjP]. In sentences where more than one nominal moves, the highest nominal moves first which is usually the thematic subject [spec, vP]. The sentence in (57) is in VSO order with the subject (i.e. the genitive construction *omm al-bent* ‘the girl’s mother’) in a postverbal position in [Spec, vP]. This subject (which bears the iSoP feature) moves from [Spec, vP] to [Spec, SubjP] to satisfy the uninterpreted uSoP feature yielding an SVO sentence (57b).

- (57) a. *aʃtra-t* **omm** **al-bent** *al-fostan* VSO
buy.perf-3.sg.f mother.sg.f the-girl.sg.f the-dress.sg.m
‘The girl’s mother bought the dress.’
b. **omm** **al-bent** *aʃtra-t* *al-fostan* SVO
mother.sg.f the-girl.sg.f buy.perf-3.sg.f the-dress.sg.m
‘The girl’s mother bought the dress.’

There are two options to form the DPS construction from the example in (57a) depending on what non-subject nominal carries the iSoP feature. In the first option, the possessor *al-bent* ‘the girl,’ bears the iSoP feature, so it moves to [Spec, SubjP] followed by the VSO sentence as in (58a). Alternatively, the thematic subject can also bear the iSoP feature and moves to [Spec, SubjP] which results in an SVO predicational sentence as in (58b). The movement of the possessor nominal results in a copy of its phi-features left in its merge position. These features are spelled out as a possessive clitic attached to the nominal *omm-ha* ‘her mother’

- (58) a. **al-bent** aʃtra-t omm-**ha** al-fostan
 the-girl.sg.f buy.perf-3.sg.f mother.sg.f-3.sg.f the-dress.sg.m
 ‘The girl, her mother bought the dress’ (Literally: The girl, bought her mother the dress).
- b. **al-bent** omm-**ha** aʃtra-t al-fostan
 the-girl.sg.f mother.sg.f-3.sg.f buy.perf-3.sg.f the-dress.sg.m
 ‘The girl, her mother bought the dress’.

Another option is when the object *al-fostan* ‘the dress’ bears the iSoP feature, so it moves to [Spec, SubjP]. The outer nominal *the dress* can be followed by a VSO sentence as in (59a), or it can be followed by an SVO sentence (59b) when the thematic subject bears the iSoP feature and moves to a preverbal position. The movement of the object nominal results in a copy of its phi-features left in its merge position. These features are obligatorily spelled out as an object clitic attached on the verb:

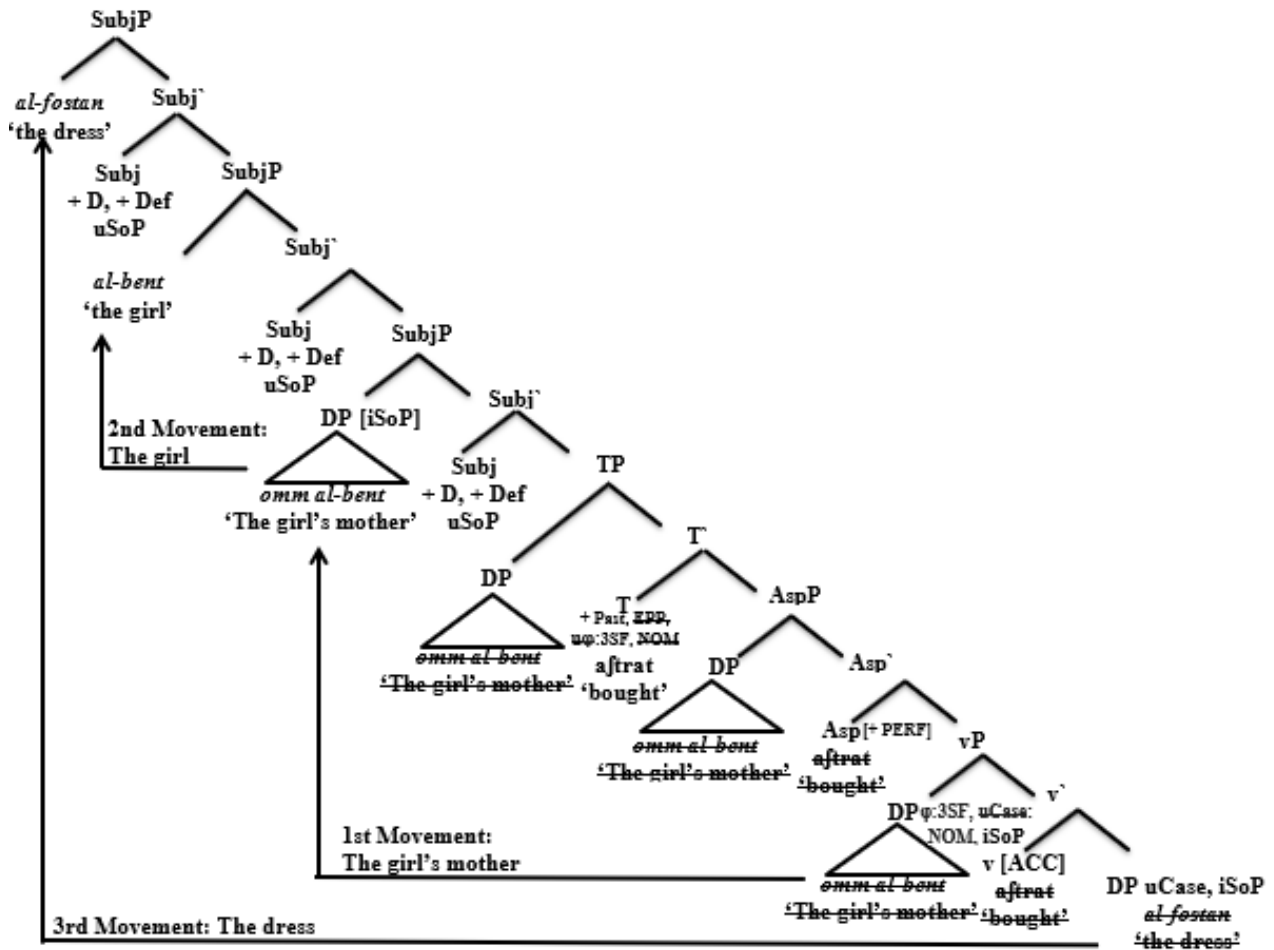
- (59) a. **al-fostan** aʃtra-t-**o** omm al-bent
 the-dress.sg.m buy.perf-3.sg.f-3.sg.m mother.sg.f the-girl.sg.f
 ‘The dress, the girl’s mother bought it.’
- b. **al-fostan** omm al-bent aʃtra-t-**o**
 the-dress.sg.m mother.sg.f the-girl.sg.f buy.perf-3.sg.f-3.sg.m
 ‘The dress, the girl’s mother bought it.’

It can be observed that in all the previous examples of this section, a maximum of two nominals undergo movement to the recursive clause-initial [Spec, SubjP] position to satisfy the uSoP feature on the head Subj. These movements are structurally constrained by the Shortest Move principle in which the highest nominal moves first. Recall from section 6.3.3.2 above that this

constraint only applies on nominals that bear the iSoP feature, which accounts for examples in which thematic subjects stay in situ in [Spec, vP] while non-subject nominals move to [Spec, SubjP] as in examples (58a) and (59a). In addition, more than two outer nominals can precede sentential predicates which results in three preverbal nominals preceding the verb.

- (60) a. *al-fostan* *al-bent* *omm-ha* *aftra-t-o*⁶⁹
 the-dress.sg.m the-girl.sg.f mother.sg.f-3.sg.f buy.perf-3.sg.f-3.sg.m
 ‘The dress, the girl, her mother bought it.’

b.



⁶⁹ Such examples are not commonly used in everyday language and may be considered marginal, possibly due to reasons related to mental processing and memory limitations. In the tree diagram, I do not involve the Root Phrase only because of space limitations.

In example (60), I demonstrate the movement of three nominals (all bearing the iSoP feature) to clause-initial [Spec, SubjP] positions. The three movements follow the same principle of Shortest Move yielding the sentence in (60a). The violation of the Shortest Move principle discussed above generate ungrammatical sentences as the ones exemplified in (61). In (61a), the object *the dress* undergoes movement first then the subject *the girl's mother* undergoes the second movement to a higher [Spec, SubjP] position. In (62b), the object *the dress* also undergoes movement first then the possessor 'the girl' undergoes the second movement to a higher [Spec, SubjP] position.

- (61) a. *omm al-bent al-fostan aftra-t-o
 mother.sg.f the-girl.sg.f the-dress.sg.m buy.perf-3.sg.f-3.sg.m
 'The girl's mother, the dress, bought it'
- b. *al-bent al-fostan omm-ha aftra-t-o
 the-girl.sg.f the-dress.sg.m mother.sg.f-3.sg.f buy.perf-3.sg.f-3.sg.m
 'The girl, the dress, her mom bought it.'

Having discussed the movement of non-subject nominals to higher subject position in [Spec, SubjP], I now turn to a distinguishing characteristic that always accompanies this movement, which is the obligatory resumptive pronouns.

6.3.3.4 Obligatory resumption

In Chapter 3, I discussed the occurrence of optional resumptive pronouns in positions after preverbal subjects. They may appear directly after the preverbal subject, after the aspect word *ged* 'already' or after the verb and the aspect word (62).

- (62) al-bent (hya) ged (hya) akal-at (hya) al-tufaħa
 the-girl.sg.f (3.sg.f) already (3.sg.f) eat.perf-3.sg.f (3.sg.f) the-apple.sg.f
 'The girl (she) already (she) ate (she) the apple.'

I argued that these resumptives result from successive movement of thematic subjects from their lower position in [Spec, vP] to [Spec, SubjP] passing through [Spec, AspP] and [Spec, TP]

leaving a copy of the phi-features in these positions. This successive movement of subjects throughout these specifier positions avoids violating the Shortest Move principle (nominals move to the closest specifier position available). Although these copies can optionally spell out as resumptive pronominals, this process is limited to only one spell-out which is constrained by the Chain Reduction principle of Nunes (1995) that blocks the spell-out of all but one copy in a movement chain. Recall that the spell out of one resumptive, in addition to spelling out the moved nominal, is allowed by the non-distinctiveness principle of Nunes (1995) because the head of the chain and the copy are distinct enough from each other since the resumptive is only a copy of the phi-features of the moved nominal (See chapter 2 for more details).

In this chapter, I discuss the occurrence of obligatory resumptive pronouns in the DPS construction in which outer nominals are followed by a sentential predicate. Such sentential predicates obligatorily include a resumptive pronominal that is co-indexed with the outer nominal.

- (63) a. al-bent (ana) zort-**ha**
 the-girl.sg.F (I) visit.perf.1.sg-3.sg.F
 ‘The girl, I visited her.’
- b. al-bent **omm-ha** **jaat**
 the-girl.sg.F mother.sg-3.sg.F came.Perf.3.sg-F
 ‘The girl, her mother came.’

It can be concluded that pronominals bearing nominative Case may optionally spell out whereas pronominals bearing accusative Case (i.e. direct objects and indirect objects) or genitive Case (i.e. possessors in construct states or objects of prepositions) must be obligatorily spelled out. Note that after non-subject nominals move to [Spec, SubjP], the structural genitive or accusative Case is overridden by nominative Case that is valued by the head of SubjP, as discussed earlier in section 6.3.3.1. Accordingly, the head of the movement chain (the moved nominal to [Spec, SubjP]) carries the nominative Case whereas the tail of the chain carries a distinct Case feature (e.g. the accusative or genitive Case). Drawing on the insights of Nunes (1995) that the Copy operation decides if two copies are distinct or not, these two copies (the one with nominative Case and the one with accusative or genitive Case) in the movement chain are recognized by the

Copy operation as distinct. I suggest that the Copy operation in Arabic is sensitive to Case features which are the key feature to mark two copies as distinct. Thus, lower copies are marked distinct from the head of the chain when they carry different Case features, and that is when these copies are spelled out.

Another observation worth considering is the asymmetry between subjects and objects, regarding agreement with the verb and the nature of their movement to higher subject position in SubjP projection. When thematic subjects move from their first-merged position, the phi-features of the subject are spelled out on the verb because of the agreement relation between the subject and the verb. It is not necessary to spell out the resumptive copy of the phi-features of the moved nominal because the agreement on the verb accomplishes this. Thus, the spell out of the phi-features in the base position of the subject is optional since they are already spelled out on the verb. On the contrary, we can observe that Arabic has an obligatory resumption of non-subject nominals when they move in order to identify their first-merged position. More specifically, when objects move, for example, there is no other elements in the clause that carry their phi-features and Case feature. These features are not spelled on the verb as with movement of thematic subjects, so they need to be spelled out in the form of resumptives.

6.4 Summary and conclusion

In this chapter, I proposed an analysis of the outer nominals in the DPS construction in Makkan Arabic. The importance of this chapter is that it reconciles the dense conflicting literature regarding the position and derivation of these nominals. It also aims to characterize the mechanism of movement in deriving more than one preverbal nominal under the consideration that Arab linguists show serious concerns regarding preverbal subjects as a genuine position for subjects. In this dissertation, I proposed to employ Cardinaletti's (2004) projection, SubjP as a higher position for outer nominals in the DPS construction. Outer nominals are distinguished from inner nominals by selecting sentential predicates, and by the association with obligatory resumptive clitics inside the predication clause. Based on various types of evidence that these outer nominals cannot be base-generated, I proposed an alternative derivation where they

undergo movement to a recursive specifier position of SubjP. In sentences where more than one nominal undergoes movement to [Spec, SubjP], the movement is structurally constrained by the Shortest Move principle in which the higher nominal moves first to the closet [Spec, SubjP]. This chapter provided a unified account of preverbal subjects in Arabic which are equally derived by movement of postverbal subjects or non-subject nominals to a clause-initial recursive position in the A-domain.

Chapter 7

Summary, Conclusion and Future Research

7.1 Summary and conclusion

The arguments on the status of preverbal subject in Arabic are not recent, as they began in the eighth century among traditional Arab grammarians (Eid 1975; Hassan 1975; Al-Makhzomi 1986, among others). However, there is not much contemporary work that explores the properties of genuine preverbal subjects versus left-dislocated nominals in Arabic varieties. Cross-linguistically, this argument is significantly active in the sense that many studies are increasingly conducted on both side, those who argue that preverbal nominals are subjects (Cardinaletti, 1997, 2004; Goodall, 2002; Suñer, 2003; Camacho, 2006; Sheehan, 2007; Camacho, 2013, among others) and those who argue that such preverbal nominals are topics (Barbosa, 1995, Alexiadou and Anagnostopoulou, 1998; Ordóñez and Treviño, 1999; Frascarelli, 2007, among others). The status of preverbal nominals as genuine subjects has not been greatly studied in Arabic, especially by employing recent syntactic theories.

In this dissertation, I argued mainly that not all preverbal nominals are instances of left-dislocation/topicalization but can occupy preverbal subject positions. Based on the feature-inheritance approach (Chomsky 2000, 2001, 2005) and the cartography approach as implemented by Cardinaletti (1997, 2004), I assume that the functions which make up the subjects can be decomposed into various projections. According to the Agree-model, subjects are generated as external arguments in the specifier position of vP (Koopman and Sportiche 1991, Halle and Marantz 1993, 1994; Embick and Noyer, 2007). Through the Agree relation that is established between the head T and the subjects in [Spec, vP], the subject gets its nominative Case feature valued as a result of valuing and interpreting the agreement features on the probe T.

In languages like English, the EPP feature is satisfied by attracting thematic subjects to move to [Spec, TP]. However, in Arabic, this is not the case since subjects can stay in situ in their thematic position. I propose that subjects move in languages like Arabic to the specifier of the Subject of Predication (SubjP) projection to satisfy the Subject of Predication (SoP) feature

(Cardinaletti, 1997, 2004). I proposed in this dissertation that this position can optionally attract any definite nominal in the clause that bears the interpreted iSoP whether it is in a thematic subject position, object position, object of prepositions or possessor position inside a DP.

In this dissertation, I adopted Cardinaletti's perspectives regarding the recursive nature of the SubjP projection in the sense that more than one nominal can be a subject of predication. I proposed that thematic subjects, objects, possessors, or any definite or modified indefinite nominals bearing the iSoP feature can individually move to [Spec, SubjP]. Such intersecting movements obey the Shortest Move principle in the sense that the highest nominals move first, and the landing site is the closest [Spec, SubjP] position.

The movement approach that I adopted in this dissertation is the Copy Theory of Movement, in which movement entails making copies of the moved elements in the new positions, thus creating a movement chain. In this dissertation, I showed that the movement of thematic subjects that bear the nominative Case is successive leaving copies in every specifier position the nominal moves through ([Spec, vP], [Spec, AspP] and [Spec, TP]). Only one of these copies can optionally be spelled out if the head of the chain is not a pronoun itself. In that case, the head of the chain and the lower copy are not distinctive enough, and only the subject pronoun in the head of the chain can be spelled out. If the subject is a full nominal, an additional lower copy can be spelled out. When non-subject nominals (such as objects bearing the accusative Case, or possessors bearing the genitive Case) undergo movement to the SubjP projection, the head of the chain gets its original Case overridden and receives a nominative Case. The copy at the tail of the chain obligatorily spells out in the form of a resumptive pronoun bearing the accusative or genitive Case because these copies are marked as distinct by the operation of Copy which is sensitive to Case.

One of the main goals of this dissertation is to give an account of a common phenomenon in Arabic in which nominals can accumulate at the beginning of the same sentence. I proposed that Makkan Arabic has a recursive subject position which can attract any definite nominals bearing the iSoP feature (which reflect pragmatic prominence of nominals) to move to that position. Although nominals moving from thematic subject positions or non-subject positions (such as the object or possessor) can both move to clause-initial subject position, these nominals

do not equally interact with verbs. Subjects in [Spec, SubjP] that move from thematic subject position establish an Agree relation with the head T, and thus there is agreement between this subject and the verb. These subjects (the inner subjects as I referred to them in Chapter 6) display agreement with the verb. Outer subjects, moving from an object or possessor position, establish an Agree relation either with the head v (as with direction objects) or between two nominals (as in the possessive construction). Such nominals bear a genitive or accusative Case as a result of the Agree relation with functional heads other than the head T.

The derivation of VSO sentences, in addition to sentences with null subject pronouns, are discussed in Chapter 3. In these two constructions, there is no SubjP generated because subjects stay in their first-merge positions since there is no motivation for them to undergo movement to preverbal position. Building on the feature-inheritance approach of Chomsky (2000, 2001, 2005), I assumed that agreement and Case features evaluation takes place through the relation Agree which is established between the probe T and the nominal in [Spec, vP]. To achieve the VSO order, I suggested that they are derived by verb movement from v to T (passing through the head Asp), and that this movement satisfies the EPP feature. By employing the Distributed Morphology approach, I assumed that verbs are originally neutral Roots that are combined with a category-defining head v. By adopting the proposal of Azhari (2019) and Azhari and Ghomeshi (2019), I assumed that the head Asp provides the templatic patterns necessary for spelling out the verbs. This point raised questions regarding the status of vP as a phase in which verbs are supposed to be spelled out in Arabic (I leave this point for future research). At the end of Chapter 3, I suggested that the [Spec, TP] position is not a subject position in Makkan Arabic, and that it is only a position that subjects pass through when undergoing movement to [Spec, SubjP]. In other words, this position is only a part of the chain (e.g. chain linker) but is not the head of the chain in Arabic. Theoretically, TP is a functional projection, and movement to the specifier of TP takes place to fulfill pure syntax functions (e.g. checking EPP feature). This position [Spec, TP] is unique and cannot be recursive, which matches the properties of subjects in languages like English. However, in languages like Arabic, one unique subject position is not forced in clause structure, and subject movement (if it exists) is not motivated by syntax but to fulfill discourse functions. Thus, a recursive position to which movement is optional is needed to match the

properties of subjects in languages like Arabic. This created a theoretical requirement to have the [Spec, SubjP] to account for preverbal subjects in Makkan Arabic. Empirically, I showed that a resumptive subject pronoun can optionally appear in various positions after preverbal subjects in Makkan Arabic. I considered such resumptive pronouns to be the spell out of chain links, which supported the movement approach that I adopted for the derivation of preverbal subjects. The movement of thematic subjects result in multiple copies of the moved subjects in the specifier positions of vP, AspP and TP. Only one of these copies can optionally spell out. The spell out of more than one of the copies is banned by the distinctiveness requirement, which requires copies to be distinctive enough in order to spell out (Nunes1995, 2000, 2004).

The derivation of preverbal subjects and topicalized/left-dislocated nominals are discussed in Chapter 4. I emphasized the definiteness requirement of preverbal subjects in comparison with postverbal subjects. Indefinite nominals are allowed in postverbal subject position since nominals in this position are not required to be lexically governed whereas preverbal subject and left-dislocation positions do not allow indefinite nominals. Drawing on Delfitto (1997, 2007) and Longobardi (2000, 2001), indefinite nominals which lack the determiners are not allowed in preverbal positions, but modification can expand the distribution of indefinite nominals by allowing indefinite nominals preverbally. I suggested in this chapter that existential and possessive particles can also precede indefinite and allow them preverbally. I argued that these existential and possessive particles have developed another usage as verbs while preserving their usage as prepositions. To distinguish preverbal subject position from left-dislocation positions, I employed the diagnostic test of preverbal nominals co-occurring with wh-phrases to argue that there are two preverbal positions in Makkan Arabic: A subject position after wh-phrases and a peripheral left-dislocation position before wh-phrases. Building on Rizzi (1997), I analyzed wh-phrases as occupying [Spec, FocP] and topicalized/left-dislocated elements as occupying [Spec, TopP]. Drawing on Landau's (2009) hierarchy on the distribution of nominals and wh-phrases, I argued that the position below wh-phrases is a subject position, which I referred to as [Spec, SubjP]. Another diagnostic test that supports the existence of a preverbal subject position in addition to a left-dislocation position is the distribution of bare negative quantifiers and modified bare nominals which can appear after wh-phrases but not

before them. I argued that these two categories of nominals can be subjects but cannot be topics, which are required to be more specific and referential than bare negative quantifiers and modified bare nominals.

After discussing verbal predicates in SVO and VSO sentences, I dedicated Chapter 5 to non-verbal predicates in copular sentences. I argued against the common assumption in Arabic that present tense copular sentences structurally lack copula verbs in two ways. First, I argued that copulas are phonologically realized to mark non-deictic present tense which refers to habitual or conditional events. The other issue that I argued against is that although copulas do not phonologically appear in deictic present tense (that refers to temporary events), copulas are not structurally absent. In deictic present tense, copulas are realized as null exponents, but the node is fully specified for syntactic features. This point showed that the discourse distinction between deictic and non-deictic events plays a role in the morphological realization of copulas in Makkan Arabic present tense. Another common assumption that I argued against in the structure of copular sentences lacking overt copulas is regarding the subject. It has been widely assumed that in the absence of copulas, preverbal subjects are obligatory and cannot be null pronouns (Eid, 1991; Benmamoun 2008; Aoun et al. 2010; Al-Balushi, 2012, among others). This goes against categorizing Arabic as a null-subject language, which allows null pronouns to be subject. I showed in this chapter that copular sentences have the same underlying structure as other sentence types. Null expletives in copular sentences that lack copulas are obligatory with weather predicates and before adjectives that select sentential complements as in *it is impossible that I go out tonight*. Subjects can also be optional despite the absence of overt copulas when referring to subjects that are well-established in the context.

Having discussed verbal predicates and non-verbal predicates, Chapter 6 is dedicated to discussing sentential predicates in the Double Preverbal Subject (DPS) construction. In such a construction, two nominals appear in subject positions, which I referred to as outer nominals and inner nominals (or more accurately, outer subjects and inner subjects). I differentiated between outer subjects and inner subjects based on the predicates that follow them: Outer subjects are followed by sentential predicates that involve an obligatory resumptive pronominal co-indexing with the outer subject. Inner subjects, which are discussed in previous chapters, are followed by

verbal and non-verbal predicates and can be resumed by optional pronouns that appear after the subjects. Because the DPS construction usually involve intersecting movements, I suggested that such movements are restricted by the Shortest Move principle, so that highest nominals move first to the closest [Spec, SubjP] position. In this chapter, I also discussed the obligatory spell-out of resumptives associated with outer subject movement which usually bear either accusative or genitive Cases. These non-nominative nominals receive a nominative Case after movement to [Spec, SubjP] since all subjects must be nominative in Arabic. The head of the movement chain and the tail receive two different Cases and thus are recognized by the operation of Copy as distinct which force spell out of the resumptive pronouns at the tail of the chain.

In this dissertation, I propose the existence of the Subject of Predication projection for Makkan Arabic, but I speculate that this analysis can be extended to other Arabic dialects or even other null-subject languages. The commonalities between these languages is that they allow preverbal and postvebal subjects, which means that subject movement is not purely motivated by syntax as is the case with English. More research is needed in this regard.

Although I explore structural differences between preverbal subjects and topicalized nominals in this dissertation, but the discussion does not involve detailed pragmatic and discourse distinctions between preverbal subjects and topics. However, I provide a brief description in 4.4 above on the discourse prominence of nominals based on their positions in the clause structure. More specifically, the higher nominals are, the more prominent they are. This view casts doubts on the validity of forcing clear-cut boundaries between subjects and topics in Makkan Arabic, and possibly in other null-subject languages. It might be better to think of the categories of subjects and topics as having scalar values rather absolute ones.

7.2 Future research

Among the questions raised in this dissertation regarding preverbal subjects in relation to their predicates, I identified two areas that stand out and require further investigations

7.2.1 The interface of syntax and discourse

The interface between syntax and discourse is not significantly highlighted as a major goal of this dissertation. However, throughout the chapters, the interaction between discourse and syntax is shown to play a strong role in building Arabic clause structure, and mainly in subject movements, null subjects and the spell-out of copulas in present tense.

First and foremost, the syntax/discourse interface is manifested in the motivation of subject movements in Makkan Arabic. According to the data discussed in this dissertation, there is no pure syntactic features that derive subject movement in Makkan Arabic. In languages like English, subjects move from their thematic position to the specifier of TP to satisfy the EPP feature on T. However, Arabic allows subjects to stay in situ in their thematic position. So, theoretically, there is no syntactic reasons to have the subject moved to a preverbal position in SVO. With the DPS construction, which I analyze in the sixth chapter of this dissertation, non-subject nominals undergo additional movements to a preverbal position. Such movements are optional and motivated by discourse-related factors. Discourse is commonly thought to have influence only on the higher peripheral projections of the A-bar area but not in the lower functional domain.

The second area in the syntax/discourse interface is in the realization of subject pronouns. Although pronouns can either be overt or null in Makkan Arabic, pronouns are mostly null except when there is a discourse need to emphasize the subject, then subject pronouns are overtly spelled out.

- (1) a. akal-at al- tofaḥ-a
 eat.perf-sg-f the-apple.sg.f
 ‘(She) ate the apple.’
- b. akal-at **hya** al- tofaḥ-a
 eat.perf-sg-f 3.sg.f the-apple.sg.f
 ‘She ate the apple.’

The last aspect that allows discourse to have an influence in the clause structure is in the spell-out of copulas in present tense. Copulas in Makkan Arabic are shown to be sensitive to

deictic information provided by discourse. More specifically, copulas in deictic present tense are overtly spelled out to mark the non-deictic present tense while copulas are spelled out as a null exponent to mark the deictic present tense. The absence of overt copulas encodes only situations that hold at the moment of speech. Present tense copular sentences appear without overt copulas to describe a temporary state in the present tense (2a). If the copula is overt as in (2b), it is understood that the encoded situation does not take place at the moment, which I refer to as non-deictic.

- (2) a. al-sama zarga
 the-sky.sg.f blue
 ‘The sky is blue.’
- b. al-sama te-koon zarg-a (fi al-ṣayf)
 the-sky.sg.f 3.f.sg-be.imperf blue-sg.f (in the-summer.sg)
 ‘The sky is blue (in summer).’

In Chapter 5, I employed the deictic feature [$\pm$ deictic] as a representation of the contribution of discourse into the realization of copulas and overall structure of copular sentences in present tense. However, more research is needed to figure out how deixis can be syntactically represented in the computation of clauses.

More research is needed to emphasize the role of discourse in constructing clause structure in Makkan Arabic, and other varieties of Arabic regarding many areas, three of which I highlight in this section.

7.2.2 Preverbal nominals in Standard Arabic

Standard Arabic is one variety of Arabic that is structurally different from all modern Arabic dialects, including Makkan Arabic. To make a generalization about null-subject languages, an account of Standard Arabic should be provided. Standard Arabic displays major structural differences regarding the agreement asymmetry and the adjacency constraints. Both areas are attested in Standard Arabic but not in modern Arabic dialects and are incompatible with the analysis proposed in this dissertation.

The VSO in Standard Arabic displays an agreement asymmetry in verbal inflections that is distinct from that found in SVO sentences. More specifically, verbs show only partial agreement with their subjects in VSO order while in SVO and null-subject sentences, verbs bear full agreement. In the literature of Arabic syntax, the verbal agreement system in Standard Arabic is believed to be influenced by word order (Mohammad 1990, 2000; Fassi Fehri, 1993, 1996, 2005; Aoun et al. 1994; Ohullah 1994; Benmamoun 1996, 2000, 2017; Shlonsky 1997, Aoun and Benmamoun 1999, Harbert and Bahloul, 2002, Abdel-Hafiz 2005, Soltan 2006, 2007, Benmamoun and Lorimor, 2006, Musbahien 2008, Aoun et al. 2010, Fakh 2016, Sahawneh 2017, among others). Soltan (2006) exemplifies the alternating verbal patterns for the sentence *the boys read the lesson* (the glosses are modified for consistency, and the translation is added) as shown in (3).

- | | | | | |
|--------|-----------------------------|-------------------|---------------------|-----------------------|
| (3) a. | ʔal-ʔawlaad-u | qaraʔ-u | d-dars-a | SV+ full agreement |
| | the-boy.pl.m-Nom | read.perf..3.pl.m | the-lesson.sg.m-Acc | |
| | 'The boys read the lesson.' | | | |
| b. | qaraʔa | l-ʔawlaad-u | d-dars-a | VS+partial agreement |
| | read.perf..3.sg.m | the-boy.pl.m-Nom | the-lesson.sg.m-Acc | |
| | 'The boys read the lesson.' | | | |
| c. | *ʔal-ʔawlaad-u | qaraʔa | d-dars-a | *SV+partial agreement |
| | the-boy.pl.m-Nom | read.perf..3.sg.m | the-lesson.sg.m-Acc | |
| d. | *qaraʔ-u | l-ʔawlaad-u | d-dars-a | *VS+ full agreement |
| | read.perf..3.pl.m | the-boy.pl.m-Nom | the-lesson.sg.m-Acc | |
- [Soltan, 2006: 2]

This agreement asymmetry in Standard Arabic is the cornerstone of the arguments against the subjecthood of preverbal nominals (Eid 1975; Hassan 1975; Al-Makhzomi 1986, Alazzawi 1990, Al-Samurra'i 2001, Soltan, 2006, 2007, Al-Kawari 2008, Al-Horais 2009, Al-Balushi 2011, 2012, Fakh 2016, among others). It is argued that the partial agreement is only obtained in VSO sentences while, in SVO sentences and sentences with null subjects, the full agreement is obtained. This agreement pattern observed with preverbal nominals and null subjects indicates that subjects are similarly null in both structures, and that preverbal nominals are not genuine subjects. In my dissertation, I assumed that SVO sentences are derived by movement from VSO

sentences. If a similar analysis is to be enforced on Standard Arabic, the agreement asymmetry must be accounted for.

The second issue that needs to be considered in Standard Arabic is the active adjacency constraints. In Standard Arabic, the adjacency constraint is active in the sense that *wh*-phrases obligatorily trigger subject-verb inversion, so that *wh*-phrases are adjacent to the verb (Shlonsky 2000; Aoun, Benmamoun and Choueiri 2010).

- (4) a. maða ʔaftara-t zainab
 what bought.sg-F Zainab
 ‘What did Zainab buy?’
- b. *maða zainab ʔaftara-t
 what Zainab bought.sg-F
 ‘What did Zainab buy?’

[Aoun, Benmamoun and Choueiri, 2010: 205]

In the DPS construction (discussed in Chapter 6), the active adjacency constraint forces the outer nominals co-occurring with *wh*-phrases to occupy only the position before *wh*-phrases (5). The outer nominals cannot separate the verb from *wh*-phrases because of the active adjacency requirement as shown in (5).

- (5) a. naadya mataa raʔaa-ha sami
 nadia when saw.sg.M-her sami
 ‘Nadia, when did Sami see her?’
- b. *mataa naadya raʔaa-ha sami
 when nadia saw.sg.M-her sami
 ‘When Nadia, did Sami see her?’

[Aoun, Benmamoun and Choueiri 2010: 191]

the adjacency constraint is not active in Makkan Arabic, and *wh*-phrases do not trigger subject-verb inversion, so both orders are acceptable as shown in (6).

- (6) a. ʔeef ʔaftara-t zainab?
 what bought.sg-F Zainab
 ‘What did Zainab buy?’

- b. ʔeef zainab ʔaftara-t?
 what Zainab bought.sg-F
 ‘What did Zainab buy?’

In the DPS construction, wh-phrases can come before or after outer nominals if they are not be separated from their resumptive clitics by an island (7). When islands are involved, such as the complex NP island in (8), outer nominals can only occur before wh-phrases.

- (7) a. **naadya** meta ʃaaf-ha sami
 nadia when saw.sg.M-her sami
 ‘Nadia, when did Sami see her?’
- b. meta **naadya** ʃaaf-ha sami
 when nadia saw.sg.M-her sami
 ‘When Nadia, did Sami see her?’
- (8) a. **naadya** ʔeef galo li al-wald ʔelle ʃaaf-ha
 nadia what said.p.M to the-boy.sg that saw.sg.M-her
 ‘Nadia, what did they tell the boy who saw her?’
- b. *ʔeef **naadya** galo li al-wald ʔelle ʃaaf-ha
 what nadia said.p.M to the-boy.sg that saw.sg.M-her
 ‘What Nadia, did they tell the boy who saw her?’

In Chapter 6, I accounted for the distribution of the outer nominal co-occurring with wh-phrases following Landau’s (2009) hierarchy and Rizzi’s (1997) CP-split approach. I analyzed the outer nominals in Makkan Arabic occurring before wh-phrases (7a) as left-dislocated nominals in [Spec, TopP] position while outer nominals occurring after wh-phrases (7b) as subjects in [Spec, SubjP]. However, this conclusion raised questions regarding the status of preverbal subjects in Standard Arabic since outer nominals are only grammatical before wh-phrases. In other words, the analysis that I proposed in this dissertation predicts that preverbal nominals in Standard Arabic are instances of left-dislocated topics. If the arguments that I made in this dissertation are to be generalized to apply on null-subject languages, an account for the preverbal nominals in Standard Arabic must be provided. Otherwise, cross-linguistic assumptions on the patterns of null-subject languages cannot be attained.

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