Cambridge Semitic Languages and Cultures

A Grammar of the Jewish Arabic Dialect of Gabes

Wiktor Gębski

UNIVERSITY OF CAMBRIDGE
Faculty of Asian and Middle Eastern Studies

https://www.openbookpublishers.com

Semitic Languages and Cultures, vol. 23

ISSN (print): 2632-6906
ISSN (digital): 2632-6914
ISBN Paperback: 978-1-80511-251-8
ISBN Hardback: 978-1-80511-252-5
ISBN Digital (PDF): 978-1-80511-253-2
DOI: 10.11647/OBP.0394

Cover image: Tunisia (2021), photo by Attila Janosi on Unsplash, https://unsplash.com/photos/green-palm-tree-near-brown-mountain-during-daytime-xlO4V1RRFIY

Cover design: Jeevanjot Kaur Nagpal

The main fonts used in this volume are Charis SIL, SBL Hebrew, Scheherazade New, and SBL Greek.

6. SYNTAX OF VERBS AND CLAUSES

1.0. Clausal Subordination

According to the definition of subordination, it "refers to a syntactic dependency between clauses in a multiclausal sentence, in which the subordinate clause must be annexed to an independent clause but not conversely" (LeTourneau 2011). On the other hand, Pat-El (2012, 21), following Otto Jespersen, applied, in her study on the historical development of Aramaic syntax, a definition of subordination based on the 'nexal hierarchy', where the main nexus contains the lower one, which is syntactically dependent on it. The term 'subordination', therefore, is perceived as the opposite of 'coordination', which describes the relationship between two independent clauses that are not embedded.[1] From both definitions quoted here, one can gather that subordination is a relatively wide category, which covers numerous types of syntactic dependency. In my study of subordination in Jewish Gabes, I will consider three types of subordinate clauses: relative clauses, adverbial clauses, and complements. I shall analyse these syntactic structures from two perspectives, namely, the historical one, aimed at demonstrating the place of Jewish Gabes in a wider Semitic framework, and the cross-linguistic one, which will enable a typological approach.

[1] As will be shown in the course of this chapter, this is not always the case, and the two categories can interconnect.

 https://doi.org/10.11647/OBP.0394.06

1.1. Relative Clauses

The relative clause is a syntactic construction that permits description and specification of the noun it modifies in a form of a clause. In this sense, the relative clause functions as an adjective, since it provides additional information about the item. Any relative clause has the following components: (1) head noun, often referred to in this study as 'head', (2) relative pronoun, which, as will be demonstrated, is omitted in asyndetic constructions, and (3) clause. In terms of the spectrum that relative clauses cover, we can distinguish two types, namely, restrictive and non-restrictive. The former limits the reference of the head noun in order to assist the hearer in identifying its referent. The function of a non-restrictive relative clause, on the other hand, is to add information about the head noun, whose referent is already identifiable by the hearer. Another distinction, which will be of special interest in my investigation, is that between attributive and non-attributive relative clauses. The attributive type assigns a feature or property to the noun. Therefore, both restrictive and non-restrictive clauses are included in this category. On the other hand, non-attributive clauses do not specify the item, but rather have an 'open' reference, which in English is introduced by pronouns like 'whoever', 'whatever', 'everyone', etc.

In this section, I will discuss several types of relative clauses present in Jewish Gabes. I will analyse both attributive and non-attributive relative clauses, paying special attention to the syntactical behaviour of definite and indefinite heads. Before demonstrating the structure of relative clauses in Jewish Gabes, I shall present some typological aspects of relative clauses, followed by

a brief outline of the development of relative clauses in Semitic. This approach may help explain the syntactic behaviour of some types of relative clauses in Jewish Gabes.

1.1.1. Data

Below, I present examples of relativisation occurring in Jewish Gabes. The passages that are followed by a number placed in brackets have been taken from the text corpus and thus represent free speech, while those that are not followed by a number have been obtained by means of a questionnaire. It should be marked, therefore, that the latter, notwithstanding their correctness, do not reflect the most acceptable and natural relative clauses.

The examples presented below have been divided into groups with definite and indefinite heads, and subsequently further classified according to the position of the head noun.[2]

1. Attributive clause with definite head noun
    a. Head that has the grammatical role of object
        1. *hāk əl-xabža li ʕṭīthālək ša ʕməlt bīha*? (1:27)
        ‘The bread that I gave to you, what have you done with it?’
        2. *hāk əṛ-ṛāẓəl li ʕaḍḍātu l-kəlba hūwa ṣāḥbi*
        ‘That man whom the bitch bit is my friend.’

[2] This taxonomy has been borrowed from the grammar of Ṣanʕānī Arabic (Watson 1993, 230), and the reason I find it useful is its relevance for examination of the Accessibility Hierarchy proposed by Keenan and Comrie (1977).

3. *l-ʕṣāfīr əlli šəfthəm āməš žāw mən əṣ-ṣaḥra*
   'The birds that you saw yesterday had come from the desert.'

b. Head that has the grammatical role of subject

4. *əršəm əl-yədd li ʕṭātni (ə)l-kəff tətqaṣṣ* (6:85)
   'Write: the hand that hit me will be cut.'

5. *l-ḥāža əlli ʕažīža ʕalīk xūdīha* (7:89)
   'The thing that is valuable for you, take it.'

6. *nhār wāḥəd žāt əxt l-mṛa hādīk li təṣṛi mənhu əl-kmāž*
   'One day the sister of that woman who buys from him fabric came.'

7. *əxti rāxəl əlli təškən fi-tūnəš žāt tẓūrna*
   'My sister Rachel, who lives in Tunis, came to visit us.'

c. Head that has a noun as an annex

8. *əl-mṛa ḍāṛha kbīra bərša*
   'The woman whose house is big.'

d. Head that is the complement of a preposition

9. *əl-bīr əlli nša yāxdu mənnu l-ma*
   'The well from which women take water.'

2. Attributive clause with indefinite/indefinite-specific head noun

a. Head that has the grammatical role of object

1. *ma ʕandūš mākla yaʕṭi l-ẓġāru* (3:4)
   '[he] does not have food to feed his children.'

b. Head that has the grammatical role of subject

2. *təmma wāḥəd li hūwa ma tḥarrəkš, hūwa yəštənna ḥatt yṭīḥlu mākla fi-fəmmu* (2:16)
'There is a man who does not move, he waits for the food to fall down in his mouth.'

3. *qāllu: škūn li qāʕəd mxabbi* (4:37)
'They said: who is the person who is hiding?'

4. *kānu žūž famīlyāt yətʕārqu mʕa bīnāthəm*
'There were two families, which were arguing with each other.'

5. *tʕadda ḥda ṛāẓəl u kān rāqəd*
'He passed next to a man who was sleeping.'

6. *rqāt mṛa ʕamya u tərḥi fi-l-qamḥ* (4:18–19)
'She found a blind woman who was grinding wheat.'

c. Head that is the complement of a preposition

7. *əṛ-ṛāẓəl ṭlaʕ u rqa žməl ʕalī ṣənḍūq kbīr* (4:85)
'The man came out and found the camel with a big box on it.'

8. *ṛqa hādīk əl-məṛt wāḥda li ʕandha ḍaṛba* (2:47)
'He found that woman who has a mark.'

9. *ḥānūt kbīra wa fīha wāḥəd ybīʕ kmāž*
'A big shop, in which a man was selling fabric.'

The relative particle in Jewish Gabes is either *əlli* or *li*. As in virtually all modern Arabic dialects, the relative particle in Jewish Gabes is not inflected for gender, number, or person. As argued by some scholars, it stems from the CA relative pronoun *allaḏī*, which was inflected for gender, person, and number (Wright

2005, I:270).[3] Three components of this pronoun can be identified, namely the demonstrative element /al/, the demonstrative morpheme /l/, and the demonstrative pronoun *ḏā* or *ḏū*. The relationship between the relative pronoun and demonstratives is attested also in Biblical Hebrew, which, according to historical-comparative reconstruction, used at an early stage to utilise the near demonstratives as relative pronouns (Holmstedt 2011).[4]

1.1.2. Cross-Linguistic Typology

Relative clauses, due to their complex character, can be divided into multiple categories based on various criteria. In terms of the position of the head noun, a relative clause can be either post-nominal (as in English and Jewish Gabes, for example), prenominal (as in Alambak, a variety of languages spoken in Papua New Guinea), or internal, where the head occurs within the restricting

[3] As observed by Pat-El (2017, 257), there is no phonological motivation behind this etymology. It is more plausible that the CA relative pronoun is an innovation combining the two elements /l/ and /d/, which already existed in the dialects. The vast majority of modern varieties of Arabic use the /lli/ variant, whose relationship to the CA one is disputable. It is worth noting, however, that there are dialects which use the /d/ variant, presumably reflecting the Proto-Semitic relative morpheme /d/, e.g., Cypriot Arabic, and some varieties of Moroccan and Yemeni Arabic. The closest dialect to Jewish Gabes which uses this pronoun is Djidjelli, where one finds /əddi/ (Marçais 1956).

[4] Apart from a presumed early relative strategy involving near demonstratives, Biblical Hebrew also possesses another relative complementiser of a dual nature, namely, the definite article /ha-/ (Holmstedt 2011). This in turn indicates a similarity between relative clauses and attributive adjectives (Goldenberg 1995).

clause (as in languages spoken in Southern California and North-West Mexico). Moreover, within the category of internally headed relative clauses, scholars distinguish also correlative clauses, in which the relative clause is outside the main clause, but linked anaphorically to the noun phrase (Dryer 2005).[5] Thus, a more general division can be drawn based on the position of the head noun, namely, relative clauses can be either externally-headed or internally-headed (Holmstedt 2011). As will be shown in §1.1.4, Jewish Gabes uses external, postnominal relative clauses.

In an extensive study of the formation of relative clauses in about fifty languages, Keenan and Comrie (1977, 66) attempted to produce a set of universal properties shared by relative clauses appearing in all those languages. They pointed out a further division of relative clauses, based on the strategy of their formation: case + /case -. In the case strategy, the nominal element in the restricting phrase unequivocally codes the grammatical role of the head noun that is being relativised. This strategy is particularly common in languages which possess a case-marking system (e.g., Slavic languages). Nonetheless, languages without cases can also utilise the case strategy by means of prepositional phrases, e.g., 'the house in which the family lived'. Here the preposition 'in' is included in the restrictive clause and clearly indicates which grammatical role of the head noun is relativised. This

[5] Some more detailed divisions include also adjoined relative clauses, present in some Australian languages (e.g., Diyari), and double-headed relative clauses, represented by a single language, Kombai (Trans-New Guinea; Austin 1981, 188; Dryer 2005).

strategy will also be relevant to the formation of relative clauses in Jewish Gabes.

The investigation conducted by Keenan and Comrie resulted in the establishment of the Accessibility Hierarchy, which aims to indicate the positions in a sentence from which a noun phrase can be relativised. Keenan and Comrie claim that the relativisability of these positions is uneven and can be presented in the form of a gradually decreasing sequence, where the left extreme designates the most relativisable position, while the right one marks a position that is unlikely to be relativised:

> Subject > Direct Object > Indirect Object > Oblique > Genitive > Object of Comparison (Keenan and Comrie 1977, 66)

This means that, from a cross-linguistic perspective, the subject is the position of the head noun that is most frequently relativised by a restrictive phrase, while an object of comparison would usually not be.[6] The hierarchy has some constraints, however, and languages usually allow only certain positions to be relativised

[6] This is the case in some Romance languages, where the comparative preposition and the relative pronoun are homonymous or closely related, and therefore objects of comparison are not relativisable. For example, in Spanish, any preposition in a restrictive clause precedes the relative particle, e.g., *el cajon del que saqué el arma* 'the drawer from which I took the gun'. The relative pronoun used for inanimate nouns has the same form as the comparative particle, i.e., /que/, thus a sentence where the homonyms stand next to each other is ungrammatical, e.g., * *la casa que que mi casa es mas alta* 'the house than which my house is higher'. The same situation is found in French (Keenan and Comrie 1977, 74).

by means of the primary strategy (i.e., without promoting the noun phrase to the position of subject by, for example, changing the voice). Thus, one finds languages where only a subject can be relativised (Western Malayo-Polynesian languages), only subjects and direct objects (Welsh), only subjects and indirect objects (Basque), etc. According to the results of the investigation, virtually all the languages permit only the subject to be relativised by means of the primary strategy. The explanation of the constraints of the Accessibility Hierarchy proposed in the study involves a psychological dimension of comprehensibility (Keenan and Comrie 1977, 88). It has been demonstrated by various additional studies that speakers deal with the unacceptability of certain positions being relativised by reformulating the idea expressed by the unacceptable sentence. My informant of Spanish categorically rejected as ungrammatical the following phrase involving relativisation of an object of comparison: **el hombre que que Maria es mas alta* 'the man whom Maria is taller than', and immediately proposed: *el hombre, que es mas bajo de Maria* 'the man who is shorter than Maria', where 'the man' has been promoted from object of comparison to subject. In Modern Hebrew, in turn, an object of comparison seems to be more acceptable when followed by a verb. My informant accepted the following sentence as natural and correct: הגבר שרחל גבוהה יותר ממנו, דחף אותה 'the man, whom Rachel is taller than, pushed her' but found the sentence without the predicate somewhat unnatural.

Hence, it can be assumed that an accessibility hierarchy established for a certain language based on free speech will represent the most acceptable instances of relativisation, which were

judged by a speaker as most comprehensible and natural. Keenan and Comrie (1977, 90) point out that their hierarchy should not be treated as a fixed grammatical order but rather as a continuum of acceptability. It is plausible, therefore, that some positions will not be relativised in free speech but will be accepted by the speaker to some degree in a questionnaire.

1.1.3. Relative Clauses from a Semitic Perspective

The nature of relative clauses has been discussed extensively in scholarship on Semitic languages. Undoubtedly, relativisation constitutes a sort of 'promotion' of the head noun, which, by means of extraposition, acquires a higher level of prominence. Holmstedt (2011), in his description of relative clauses in Biblical Hebrew, points out that every relative clause can be characterised by two factors, namely, subordination, since the relativised clause is syntactically dependent on the head noun; and the pivot constituent, which relates to the polyfunctionality of the head noun in a relative clause.

From a historical point of view, relative clauses are linked to the construct state. As pointed out by Pat-El (2012), all Semitic languages have two strategies for marking nominal attribution, namely, nominal dependents and adnominal complements. Relativisation in Proto-Semitic was expressed by means of a relative-determinative pronoun *dV/tV, which was fully inflected for gender, number, and case (Huehnergard 2006). Moreover, it was in the construct state and the clause following it depended on it. At a later stage, the pronoun lost its inflection and became a particle. It has been assumed, therefore, that the original construction

used to express adnominal attribution was the construct state. As has been demonstrated by Goldenberg (1995), adjectives and relative clauses in Semitic also originally reflected dependence on a head noun. Numerous examples from Akkadian indicate that both the head noun and the attributive verb bear marks of attribution (lack of case marking in the former, and a 'subjunctive' -u suffix in the latter). Biblical Hebrew too reflects vestiges of an attributive structure of relative clauses: קריית חנה דוד 'the city where David settled' (Isa 29.1).

This type of syntax is reflected in some modern dialects of Arabic. In the dialect of the mountain Arabs in northern Morocco who are known as Žbāla, variants of the particle /d/ are used both in relatives and in genitives.[7] A similar function is performed by the Aleppan particle /il/, which nominalises the relative clause and stands in the construct state as *nomen regens* of the head noun (Brustad 2000, 101, 109). As will be demonstrated in §1.3.5, some temporal clauses reflect a parallel construction.

---

[7] The fact that the /d/ element marking genitives is attested almost exclusively in the western Maghreb (Morocco and Algeria) means that it could have emerged due to contact with Romance languages. In opposition to this claim, it could be argued that the /d/ genitive exponent is attested, albeit scarcely, in the Quran, and therefore reflects the original morpheme. As an alternative solution, it could be proposed that the /d/ element existed as an obsolete form in some varieties of Arabic, but the presence of a Romance-speaking population in north-western Africa, and the fact that these languages utilise a homonymic morpheme to mark a genitive relationship, might have brought the /d/ element into wider use (Heath 2015).

One of the central questions in investigation of the syntax of relative clauses is whether the relative pronoun syntactically operates within the relative clause. This question has already been addressed by Pat-El and Treiger (2008), and their study of CA is of particular interest for understanding the modern dialects as well. Unlike most other Semitic languages, Arabic does demonstrate case inflection of relative pronouns in the dual, and the syntactic function of the relative pronoun can therefore be precisely determined (Wright 2005, I:271). Contrary to what has been argued by some Semitists (Reckendorf 1921, 428), the relative pronoun is conditioned by the syntagm of the noun phrase, and not by the relative clause. This is the major difference between Semitic and Indo-European languages.[8] The two following examples should illustrate this difference:

(1) Arabic:

arinā š-šayṭānayni llaḏayni ʔaḍallānā[9]

show.IMP.us devil.DU.ACC REL.ACC lead.astray.SFX.DU.us

(2) Polish:

wskaż nam dwóch diabłow którzy nas zwiedli

show.IMP us two.ACC devils.ACC REL.NOM us lead.astray.PERF

'Show us two devils who led us astray.'

In Polish, which is an Indo-European language with an abundantly developed case system, the case of the relative pronoun (*który*) is conditioned by the syntax of the relative clause, while

[8] This discrepancy has already been observed by Wright (2005, II:320).

[9] This example originally occurs in Wright (2005 II:320); the transcription is quoted according to Pat-El and Treiger (2008). The translation in Polish has been done by the author.

in Arabic, it agrees with the head noun. Nonetheless, the gender and number inflection of the relative pronouns in Indo-European languages is derived from the head (pro)noun. It can therefore be assumed that, in Indo-European languages, the relative pronoun constitutes a syntactic link between the head (pro)noun and the relative clause. In Semitic languages, on the other hand, the (pro)nominal phrase is connected to the relative clause by means of the resumptive pronoun.

In sum, previous studies undertaken in the historical syntax of Semitic clearly indicate that adjectives, genitives, relative clauses, and prepositional clauses are manifestations of the same attributive relation. The relative pronoun is best explained as a substantival modifier standing in apposition to the head (pro)noun. As a result of this assumption, the relative clause in Semitic is treated syntactically as a substantive (Pat-El and Treiger 2008).

1.1.4. Data Analysis

I shall start the discussion of the syntactic behaviour of relative clauses in Jewish Gabes by arguing against the claim made by Harell (1962, 164) regarding Moroccan Arabic that the subordinate clause is a restrictive adjectival modifier. Not only is this statement not true for Moroccan Arabic, as has been proven by Brustad (2000, 89), but it does not hold water in other Arabic dialects either. In Jewish Gabes, relative clauses can modify restricted and non-restricted nouns alike. Example (1.7) above (§1.1.1) confirms this assumption, i.e., the head noun ‘my sister

Rachel' is already restricted and there is no doubt which sister the speaker is referring to.

The data clearly demonstrates that relative clauses in Jewish Gabes display different behaviour depending on the definiteness of the head noun. First, the relative pronoun tends to occur primarily in sentences with highly individuated antecedents. Therefore, the *li/əlli* pronoun often, as in examples (1.1) and (1.2), accompanies nouns preceded by demonstrative pronouns, whose referent is very clearly specified. Similarly, in example (1.6), the elder woman had appeared in the story before, and thus her individuation and textual prominence are well established.

Apart from the instances of conspicuous specificity of the head noun, the relative pronoun occurs also in clauses whose antecedent is indefinite-specific. In this kind of sentence, the referent, notwithstanding its formally indefinite character, is in fact narrow and textually prominent. In example (2.3), the identity of the man is not specified, but the speaker is referring to a specific person possessing a defined quality. Example (2.8) represents a usage of the indefinite-specific article that is even more explicit, since it is preceded by a demonstrative, and there is hence no doubt that the referent is individuated.

On the other hand, clauses modifying entities of low individuation that are textually non-prominent lack the relative pronoun. This is the case, for example, in statements of non-existence, as in (2.1). In addition to the omission of the relative pronoun, in some indefinite clauses, a conjunctive particle occurs, as demonstrated by examples (2.3) and (2.6). The question arises as to the type of circumstances in which an indefinite head noun is

relativised asyndetically, and when, on the other hand, the relativisation is realised by means of coordination. It seems that, in asyndetic clauses, the verb functions as an adjectival modifier, as in example (2.4), i.e., 'there were two arguing families'. On the other hand, /wa/ or /u/ introduces a verbal modifier, and the focus is on the actual action, as in example (2.6), rather than on the quality of the modified term.

Relativisation coded by means of coordination is of particular typological interest. It can be analysed in terms of the so-called Mismatch Problem discussed by Cristofaro (2005, 21) in her study on subordination. In a number of languages, the relationship between coordination and subordination is vague, and the meaning must be inferred from two non-embedded juxtaposed clauses. This is the case in Gumbaynggir (Australia), which does not utilise any grammaticalised construction to convey relativisation. Jewish Gabes, on the other hand, does possess a specific construction for clearly coding relativisation, but examples (2.5) and (2.9) suggest that, in sentences with an indefinite head noun followed by a relative clause containing a verb, the coordinative structure, with or without *waw*, is preferred. Such syntactic behaviour is best explained by a continuum approach, according to which clause linkage is not seen as a fixed grammatical category, but rather in terms of coordinate-like or subordinate-like types (Foley and Van Valin 1984). Consequently, based on the criteria of dependency and embedding, a third category has been proposed, namely co-subordination (Van Valin and LaPolla 1997, chapter 8). It combines the lack of embedding typical of

coordination on the one hand, and the dependency that characterises subordination on the other. Therefore, the instances of ambiguous relativisation in examples (2.5) and (2.9) could be explained as co-subordinative, since they do not involve embedding, but they do involve the dependency of one action upon another, i.e., in (2.5), the action of seeing semantically engages the action of sleeping.

The correlation between the indefinite-specific category and the occurrence of the *li/əlli* pronoun is attested in many modern Arabic dialects. Even though Brustad (2000, 95) does not present any examples of indefinite noun phrases with conjunctive relative clauses, she reaches the same conclusion regarding indefinite nouns followed by *əlli*, namely, the primary function of this construction is to narrow the reference of the head noun. Nonetheless, in her data, only unmarked indefinite-specific nouns are treated in this way, while those accompanied by *wāḥəd* behave like indefinites (Brustad 2000, 96). This is a rather paradoxical conclusion, since *wāḥəd* usually marks indefinite-specific nouns with a higher degree of individuation and textual prominence (new topic marker). In Jewish Gabes, by contrast, *wāḥəd* does attract the relativiser. Brustad mentions, however, that in Moroccan Arabic, nouns marked with another indefinite-specific article *ši* can be relativised with *li*. It might be possible, therefore, that North African dialects permit the relativisation of indefinite-specific nouns with the relativiser, but to different degrees.

The lack of a straightforward correlation between definiteness and use of relative pronouns does not seem to be an innovation of modern Arabic dialects. As has been observed by Blau

(1961, 232), in Mediaeval Judaeo-Arabic, there are numerous cases of interchanges between asyndetic and syndetic relative clauses.[10] Usually, when an indefinite head noun is followed by the syndetic construction, either it has a distributive meaning, it is an ordinal number, or the head noun is generic (Blau 1979, 232). In other words, the head noun displays some features of definiteness, as ordinal numbers tend to narrow the reference, while generic nouns fall under the category of generic definiteness (see chapter 5, §1.4). This is the case with the use of *wāḥəd* followed by the relative pronoun in Jewish Gabes. As has been shown in chapter 5, §1.5, the indefinite-specific article often refers to an individuated entity. At the other extreme lie definite head nouns followed by an asyndetic construction. These are well attested in CA, especially in sentences where the head noun bears the definite article due to its genericity (Wright 2005, II:318). In Jewish Gabes, however, this usage seems to be limited only to heads followed by a nominal phrase with a possessive pronoun.

Another aspect of the syntactic behaviour of relative clauses related to the definiteness of the head noun is the resumptive pronoun. Here, again, the presence of the resumptive pronoun seems to be conditioned by the individuation of the head noun, namely, it is mandatory when the head noun is definite. The examples from Jewish Gabes confirm this assumption. All five passages where the relativised position is the object pronoun

[10] Another type of interchange found in Mediaeval Judaeo-Arabic involves mismatch between the gender/number of the head noun and the form of the relative pronoun (Blau 1961, 235–37).

possess a resumptive pronoun. On the other hand, no instances of indefinite head nouns with resumption have been attested.

This relatively uniform system, which prevails in many modern dialects, diverges significantly from Medieval Judaeo-Arabic, where one finds numerous cases of omission of the resumptive pronoun in both syndetic and asyndetic constructions (Blau 1961, 240). Similarly, in Moroccan Arabic, resumption does not take place in all positions. As reported by Brustad (2000, 109), a resumptive pronoun in the position of direct object is rare. However, when the syntactic position of the referent of the head noun is that of a genitive or the object of a preposition, it is obligatory. Contrary to this, in Jewish Gabes, resumption occurs with both direct objects and objects of prepositions.

Finally, based on the examples of relativisation in Jewish Gabes, one can affirm the applicability of the Accessibility Hierarchy. Indeed, the subject (four examples) and the direct object (five examples) are the two single positions that are most commonly relativised in Jewish Gabes. The third most frequent type is relative clauses with a prepositional annex, which occur mostly with indefinite nouns. While it is possible that one may also find other positions relativised in free speech, these constructions are the ones speakers find the most understandable and natural.

To sum up, relative clauses in Jewish Gabes display a strong dependence on the definiteness of the head noun: the more individuated it is, the higher the probability that the *li/əlli* pronoun will occur. Indefinite-specific nouns are very often followed by the relative pronoun, which indicates that they fall within the

definite range of the definiteness hierarchy, in contrast to the situation in the dialects studied by Brustad, including Moroccan. In addition, it has been shown that some indefinite head nouns form relative-like clauses by means of coordination coded by *waw* or asyndetically. This can be explained by the category of co-subordination, which combines features of both subordination and coordination. Finally, as has been demonstrated, the relative pronoun *li/əlli* can introduce both restrictive and non-restrictive clauses.

The present study has been based mostly on spoken, colloquial language, which is characterised by a relative lack of syntactic complexity. In these forms of speech, asyndetic constructions are much more widespread than in literary, written language. This assumption is confirmed by Wagner, who finds numerous cases of mismatch between the definiteness of the antecedent and the occurrence of the relative pronoun. Based on letters from the Cairo Genizah, which often reflect a spoken and informal register, Wagner (2010, 217) has demonstrated that, very often, a definite head is followed by an asyndetic relative clause. As will be shown in §1.3, adverbial constructions also very often tend to be constructed asyndetically. This phenomenon, attested also in Late Judaeo-Arabic, seems to be one of the traits of the spoken register, which, in contradistinction to the written language, demonstrates less syntactic complexity and morphological marking (Wagner 2014).

1.2. Non-Attributive Relative Clauses

Head which has the grammatical role of object

1. *wa ʕāwəḍ li ʕməl ṃḥāraḥ* (1:34)
   'And he repeated the same as he did yesterday.'
2. *qāllu: ngədd, li tḥaḥḥ naʕməllək* (2:28)
   'He told him: I will guard, I will do whatever you want.'

Head which has the grammatical role of subject

3. *ža li wāqəf ʕaləyəm, qālla: žībi* (2:26)
   'The person in charge came and told her: bring him!'
4. *əl-mṛa ḥablət, tžīb wəld, ma təmmaš škūn yaqtlu* (2:55)
   'The woman was pregnant, gave birth to a son, there is no one to kill him.'
5. *təmma bīr ġārəq yāsər wa l-bīr hāda li yədxal fī ymūt, ma yəṭlaʕṣ* (2:57)
   'There was a very deep well and whoever goes in dies, does not go out.'
6. *āna qahwa wa li yəṣrəbni šahwa wa li yətʕalləm bīha təmknu daʕwa* (7:19)
   'I am coffee, and those who drink me enjoy, and those who get used to me, I become their curse.'

In addition to the relative clauses analysed in the previous section (§1.1), Jewish Gabes also possesses two types of non-attributive clauses. The first one involves the relative pronoun *li/əlli* without a head noun. As can be seen, this type is the most prevalent in the above examples, and its reference can be either human (e.g., 5) or non-human (e.g., 2). The second type, which occurs across

the dialects of Arabic, utilises non-specific, non-attributive pronouns. In Jewish Gabes, however, this is attested only scarcely.[11] The majority of dialects employ *ma* for 'what' and *mīn* for 'who(m)' (Brustad 2000, 99). As demonstrated by example (4), the interrogative particle *škūn* functions in Jewish Gabes as a non-specific relativiser for human referents, while non-human referents are relativised by *li*, as exemplified by example (2). Finally, applying the Accessibility Hierarchy, one can infer that the subject position by far outranks the object.

1.3. Adverbial Clauses

In this section, I shall consider adverbial clauses occurring in Jewish Gabes. To this end, I will first present some preliminary notes on the definition of an adverbial clause and its various types. The theoretical underpinnings of this section are mainly based on a study by Cristofaro (2005, chapter VI).[12] Subsequently, I shall discuss some aspects of the historical development of adverbial clauses in Semitic and some Arabic dialects.

---

[11] The occurrence of the two particles seems to be uneven and conditioned geographically. According to Brustad (2000, 100), while *ma* is well attested in Moroccan, it has not been found in Kuwaiti, and in Egyptian and Syrian Arabic it is used irregularly. On the other hand, *mīn* is often employed by speakers of Syrian Arabic, but has not been attested in Moroccan.

[12] In my study, I will utilise terminology applied by Cristofaro in her study on subordination. The events coded by the main and the dependent clause shall therefore be referred to as 'states of affairs'. This term has been borrowed from Functional Grammar (Siewierska 1991) and is

1.3.1. Definition and Cross-Linguistic Typology

An adverbial construction combines two clauses in such a way that the clause conveying a dependent state of affairs describes the circumstances under which the main state of affairs (henceforth: SoA) takes place. Following Cristofaro (2005, 155), I shall reject the traditional definition, which stipulates that the dependent clause is embedded in the main one. As will be shown in the following analysis, adverbial relations in Jewish Gabes are not always expressed by means of embedding, and, similarly to relative clauses, can be coded by coordination.

The following types of state of affairs will be examined in my investigation:

i) purpose
ii) temporal
iii) conditional
iv) reason
v) manner
vi) contradiction

This taxonomy aims to capture the types of adverbial clause as precisely as possible. Therefore, building on Cristofaro's model, which was based on the studies of other typologists (Givón, Kortmann, Thompson, and Longacre), I decided to expand it and add the two last categories.

Apart from the different semantic values ascribed to each type of dependent SoA, adverbial clauses differ also in terms of

---

more precise than 'event', as the latter implies dynamicity and punctuality (Cristofaro 2005, 25).

predetermination of some grammatical features represented by the SoAs. Thus, temporal and purpose clauses predetermine the time reference of the SoAs, by indicating their sequential time order (e.g., a purpose clause presumes that the independent SoA is anterior to the dependent one), or simultaneous co-realisation, as in temporal overlap. On the other hand, conditional or reason clauses do not have any inherent time reference, and their time coding depends on the context. Adverbial clauses vary also in terms of semantic integration of the linked SoAs. Purpose clauses consist of two semantically interconnected entities, which imply that the realisation of the main SoA is motivated by the dependent one. Temporal clauses, by contrast, do not convey any semantic relation between SoAs, as they occur independently of each other (Cristofaro 2005, 167).

From a cross-linguistic point of view, it is worth noting that languages code adverbial relations in various different ways. In terms of the form of the verb, a verb occurring in a dependent SoA can be either unaltered (balanced) or modified (deranked). Deranking often involves reduction of time, aspect, mood, or person agreement distinctions, resulting in a form that cannot be used independently. One of the languages that codes adverbial relations in this way is Tamil, which utilises a nominalised form with a special case marker (Cristofaro 2005, 56). The CA subjunctive can also be interpreted as a sort of deranked form, since it is marked by *fatḥa* at the end of the imperfective form, as opposed to *ḍamma* in the indicative (Wright 2005, II:60). Contrary to this, Jewish Gabes demonstrates a balanced strategy, coding subordination by means of structurally equal forms.

1.3.2. Semitic Perspective

The development of adverbial subordination in Semitic is parallel to that of relative clauses. Presumably, adverbial clauses have their origin in the same model as relative clauses, where the relative pronoun was in the construct state as the *nomen regens* of the following adnominal complement.[13] When the pronoun lost its inflection, it became a frozen particle treated as the marker of adnominal attribution, and not as part of the matrix sentence (Pat-El 2012, 24). Similarly, some nouns denoting time or place underwent a process of grammaticalisation and started functioning as adverbial particles. Arabic, following the path of North-West Semitic, Ugaritic, Akkadian, and Ethiopic, developed a system of nominal markers introducing adverbial subordination.[14]

In CA, the accusative serves as a default marker of adverbial relations. There are numerous cases of nouns which acquire adverbial function when inflected in the accusative case, e.g., *marrat-an* 'once'. Alongside these forms exist also adverbs marked by the archaic suffix /-u/, e.g., *qabl-u* 'previously', and entities that function purely as adverbs, e.g., *ġad-an* 'tomorrow', though

[13] This proves the claim made in §1.1.3, that the construct state was the default way of expressing attribution in Semitic (Goldenberg 1995; Pat-El 2008).

[14] As has been shown by Pat-El (2012, 28), Aramaic diverged significantly from other Semitic languages in terms of subordination strategies. It did not utilise nominal dependence and the only way of coding subordination was by means of the determinative-relative pronoun.

their distribution is limited (Watson 2011). The adverbial function of the accusative is conspicuous also in locative adverbs and adverbs of direction, e.g., *qarīb-an* 'near', *dāxil-an* 'inside'.

It can therefore be established that, in CA, the vast majority of adverbials are derived from nouns which function also outside adverbial contexts. This is not the case in modern dialects of Arabic, where one finds predominantly pure adverbs (Watson 2011).

1.3.3. Purpose Clauses

1. *wāḥəd mša yəṭlab ya krīm tāʕ alla* (1:2)
   'A man went to beg for money.'
2. *ma yaʕrfūṣ škūn yāxdu yəqṭlu* (2:37)
   'They did not know who took it to kill it.'
3. *aʕṭīni ḥžīna šmīʕa, u qrītīṣ wqīḍ bāš nəšʕalha* (1:19)
   'Give me a (poor, miserable) candle and a box of matches so I can light it.'
4. *baʕṭu bāš ymūt* (2:60)
   'They sent him to death.'
5. *hāk əẓ-ẓāwāḷi kull nhār xmīš, yəmši l-xu yaʕṭī flūš* (3:2)
   'That poor one goes every Thursday to his brother so he gives him money.'
6. *xūya kīf yži aʕṭī flūš bāš yaʕməl šəbbāt* (3:9)
   'If my brother comes, give him money so he can have shabbat.'
7. *qāllu: āna māši l-ṛaḇḇi yaʕṭīni bāš nwəkkəl ẓġāri* (3:18)
   'He said to him: I am going to God so he gives me something and I feed my children.'
8. *qāl: mšīt l-ṛaḇḇi nžībəlkəm bāš tāklu* (3:42)
   'He said: I went to God to bring you (food) so you can eat.'

9. *lāžma ṭṭaḇḇaṣ bāš təḏxəl* (4:16)
   'She had to lean down to go in.'
10. *ža wāḥəḏ əl-*[HE]mélex[HE] *yəškīlu* (7:66)
    'A man came to the king to complain to him.'

Judging from the data above, two types of purpose clauses can be distinguished in Jewish Gabes: (1) an asyndetic type, where the subordinated verb has a prefix form and is not preceded by any particle; (2) a syndetic type, where the purpose clause is introduced by means of the particle *bāš*. The rule governing the distribution of the variant with the particle seems to combine two factors:

1. It is utilised in the case of what can be defined as switch-reference. This term is traditionally used to describe a phenomenon in some languages of Australia, New Guinea, Northern Asia, and both Americas, which entails "verbal affixing systems indicating whether or not the subject of the affixed verb is coreferential with the subject of some other verb" (Cristofaro 2012, 70). This definition cannot be directly applied to Jewish Gabes, but without doubt, *bāš* can function as a switch-reference device.[15] In other words, it appears when the subject of the predicate in the main clause is not co-referential with the subject of the dependent clause. For instance, in example (4), the subject of the verb *bʕaṭu* is different from that of *ymūt*, hence the particle. On the other hand, in example (1), the

[15] Switch-reference morphology and personal agreement might interact in many ways. As pointed out by Cristofaro (2012, 70), modifications of personal agreement can be used to code switch-reference.

subject of both verbs is co-referential—*wāḥəd mša yəṭlab*—and therefore *bāš* does not occur.

2. *bāš* is applied in multi-verbal clauses in order to break a chain of predicates referring to the same subject. Example (9) demonstrates this usage of *bāš*.

1.3.4. Temporal Clauses

1. *aʕṭyī əl-xabža yəštaġna bīha wa waqt ywəlli* HEaʕšīrHE, *nāxdu* (1:13)
   'Give him this bread so that he becomes rich from it and when he is already rich, we will marry him [to you].'
2. *waqt l-oṃṃa kānət fi-l-kūžīna əl-bənt kānət taxšəl əl-fxār*
   'While the mother was in the kitchen, the daughter was washing the dishes.'
3. *nhār li nāxdək ma tədwəyyəš mʕa əl-nāš* (7:64)
   'From the day I marry you, you will not talk to people.'
4. *taʕddāw šəbʕa ayyām mən ən-nhār əlli mša*
   'Seven days have passed since the day he left.'
5. *līlətha li ʕarrəš, yaḥləm wāḥəd ḍəṛbu kəff* (6:64)
   'On the night of the wedding he had a dream that someone hit him with the palm of a hand.'
6. *kull mṛa li tūləd, tlāt arbʕa ayyām u yāxdu l-wəld yləwwḥu* (2:36)
   'Every woman who gives birth, after three or four days someone would take the child and throw it away.'
7. *yḥall fəmmu wa yəštənna ḥatt əl-blaḥ yṭīḥlu fi-fəmmu* (2:15)
   'He would open his mouth and he would wait until the date fell into it.'

8. *waqt hūwa ka-yʕašš fi-nəfṣ əl-līl, žāt waḥda mṛa, žāt u ləwwḥat ḥāža, hūwa yḥabb yaʕrəf šnūwa ləwwḥat* (2:32)
'While he was guarding at midnight, a woman came, she came and threw something, he wanted to know what she had thrown.'

9. *hūwa ka-yəmši fə-ṣəṭṭ əl-bḥar mḥayrān, wa hīya qaʕdət fi-l-balkūn šāfəthu yəmši* (7:70)
'While he was walking worried on the beach, she sat down on the balcony and saw him walking.'

10. *yāxdu šwəyy mən məlḥ tāʕ* [HE]ōmer[HE] *waqt yəmšīw yṣallīw*
'They would take a bit of the Omer salt when going to pray.'

11. *baʕd təšʕ u arbʕīn ykəmməlu l-*[HE]ōmər[HE] *u yaʕlqu l-məlḥ*
'After forty-nine days they would complete the Omer by hanging the salt.'

12. *kīf ža ʕammi āna ma kəntš fə-ḍ-ḍāṛ*
'When my uncle came, I was not at home.'

13. *hūwa, kānt mīta hūwa bāš ymūt ʕaləya, kān yži yərqa ʕāyša, mšāt ʕaləya* (4:102)
'He, when she was dead, was ready to die for her, so now if he comes and finds her alive, she will be in real trouble.'

14. *aṣ-ṣəḷṭān tʕadda, lqā yəẓṛaʕ fi-l-bṣəl* (7:7)
'When the sultan was passing by, he found him planting onions.'

15. *baʕd ma mātət ʕarrəš mʕa mṛa oxra*
'After [his wife] died, he got married to another woman.'

16. *aqbəl ma bdīt naxdəm kənt lāhi b-oṃṃi*
'Before I started working, I had been taking care of my mother.'

The data presented above includes different types of temporal clauses in Jewish Gabes. The vast majority of the passages consist

of two adjacent verbal clauses, one of which represents a dependent SoA, and the other the major one. However, there have been included in the data pool also a few examples of adverbial clauses which do not possess a dependent SoA, like example (11).

Typologically, three principal types of temporal clauses can be distinguished with respect to the temporal position of the dependent clause in relation to the main one (Cristofaro 2012, 159):[16]

i) temporal posteriority ('before' relations), where the dependent clause occurs after the main clause, as exemplified by example (16);
ii) temporal overlap ('when' relations), where both the dependent SoA and the main one occur at the same time, as in example (8), in which the main clause, i.e., the coming of the woman, falls within the temporal span of the dependent clause, i.e., the guarding of the livestock;
iii) temporal anteriority ('after' relations), where the dependent SoA takes place before the main clause, as exemplified in example (1), i.e., first the man will become rich (dependent SoA) and then the wedding will take place (main SoA).

This somewhat general and simplified taxonomy fails to cover some aspects of temporal relations expressed by adverbial

[16] Other scholars, for example Givón (1990, 330), propose a taxonomy based on the temporal position of the main clause in relation to the dependent one; according to his classification, therefore, Cristofaro's temporal posteriority is classified as 'precedence'.

clauses. I shall therefore propose a more detailed classification, aimed at a more accurate description of the temporal clauses present in Jewish Gabes. The division below is based on the studies of Givón (1990, II:330) and Kortmann (1997, 80), and supplements the three main types proposed by Cristofaro:

Simultaneity Overlap 'when': one of the SoAs is punctual, while the other one is continuous:

12. *kīf ža ʕammi āna ma kəntš fə-ḍ-ḍāṛ*
when come.SFX.3MS uncle.my I NEG be.SFX.1SG in-DEF-house
'When my uncle came, I was not at home.'

Simultaneity Duration 'while': indicates two continuous SoAs overlapping in the time:

2. *waqt l-oṃṃa kānət fi-l-kūžīna*
while DEF-mother be.SFX.3FS in-DEF-kitchen
əl-bənt kānət taxšəl əl-fxār
DEF-daughter be.SFX.3FS wash.PFX.3FS DEF-dishes
'While the mother was in the kitchen, the daughter was washing the dishes.'

Point of coincidence: the dependent SoA is continuous and is interrupted by a punctual independent SoA:

14. *aṣ-ṣəḷṭān tʕadda lqā yəẓṛaʕ fi-l-bṣəl*
DEF-sultan pass. SFX.3MS find.SFX.3MS.him sow.PFX.3MS in-DEF-onion
'When the sultan was passing by, he found him planting onion.' (7:7)

Terminal boundary: the dependent SoA indicates the final point of the independent SoA:

7. *yḥall fəmmu wa yəštənna*
open.PFX.3MS mouth.his and wait. PFX.3MS
ḥatt əl-blaḥ yṭīḥlu fi-fəmmu
until DEF-date fall.PFX.3MS.to.him in-mouth.his
'He would open his mouth and he would wait until the date fell into it.' (2:15)

Initial boundary: the dependent SoA indicates the initial point of a continuous SoA expressed by the main clause:

3. *n-nhār li nāxdək ma tədwīyəš mʕa ən-nāš*
DEF-day REL take.PFX.1SG.you NEG talk.PFX.2FS.NEG with DEF-people
'From the day I marry you, you will not talk to people.' (7:64)

As can be seen in the above examples, Jewish Gabes utilises several ways of expressing temporal relations in adverbial clauses. The most common particle is the grammaticalised CA noun *waqt* 'time'. It is principally used to introduce a dependent SoA of a continuous or repetitive character, as in (2) and (8). On the other hand, *kīf* marks punctual and singular SoAs, as in (12). Terminal boundary relations are marked by *ḥatta*.

In addition to the syndetic constructions, Jewish Gabes also employs the asyndetic option in temporal clauses. Among other scenarios, this occurs when the dependent SoA contains the verb 'to be', as in (13), where the particle is omitted. The coordinative type of adverbial clause is also employed in the passage exemplifying a point of coincidence, (14). Here, the continuous character

of the dependent SoA is expressed by the verb itself, which implies an extended duration of time. Similarly, in example (9), the imperfective aspect of the verb is marked by the preverbal particle /ka-/. Hence, it can be tentatively established that the coordinative construction is preferred when the dependent clause contains a continuous verb.

Adverbial clauses involving temporal nouns can be formed by means of either parataxis or hypotaxis. In the former, there is no formal relativisation, while in the latter, the temporal noun is followed by the relative particle *əlli/li*. The status of this particle is somewhat problematic, as, in this construction, it relativises indefinite nouns. Brustad (2000, 102) has observed that, in some modern dialects of Arabic, the *illi* particle can function as a nominaliser of an adverbial phrase when the head noun refers to time and is of low individuation. This resembles the original Semitic structure of nominal dependence employed with adjectives and relative clauses (Goldenberg 1995). Moreover, these constructions very often occur at the beginning of the sentence and therefore function as topic markers. This use of 'quasi-relativisation', or co-subordination, is exemplified by passage (3) and can be contrasted with passage (4), which contains the same temporal noun, but in a fully-fledged relative clause.

In sum, temporal clauses in Jewish Gabes can be expressed either through subordination by means of a temporal particle, or

through co-subordination, where two SoAs are juxtaposed without any lexical link.[17] Regarding the temporal particles, it has been pointed out that *waqt* tends to mark continuous or repetitive actions, while *kīf* is generally used for punctual and singular ones. The classification proposed by Cristofaro has been expanded by several more specific categories borrowed from Givón and Kortmann.

1.3.5. Conditional Clauses

1. *ma naqtlūkš kān tžībna agžān mən Baġdād* (2:65)
   'We will not kill you if you bring us the idle man from Baghdad.'
2. *twəlli žīn kān yži hadāk əl-ʕagžān mən Baġdād* (2:67)
   'You will turn back into a ghost if the idle man from Baghdad comes here.'
3. *kān ənti təṭlab mənni bāš(i) nži, nžīk*
   'If you ask me to come, I will come to you.'
4. *kān ʕraft li ənti qāʕad fi-l-blād, kənt nži nẓūrək*
   'If I had known that you were in the town, I would have come to visit you.'
5. *hūwa, kānt mīta hūwa bāš ymūt ʕaləya, kān yži yərqa ʕāyša, mšāt ʕaləyha* (4:102)
   'He, when she was dead, was ready to die for her, so now if he comes back and finds her alive, she will be in real trouble.'

---

[17] The pitfalls of the traditional distinction between subordination and coordination, and the fact that subordination does not necessarily involve clauses, have also been pointed out in relation to European languages (Kortmann 1997, 57).

6. *kān štənnītni tqīqa wa āna dawwītək* (5:40)
   'If you had waited for me a minute, I would have cured you.'

The particle *kān* introduces conditional clauses in Jewish Gabes. Following the distinction proposed by Givón, the above passages can be classified in two groups (Givón 1990, II:331):

1) irrealis: (1), (2), (3), (5);
2) counterfactual: (4), (6).

The structure of the first group involves two clauses, a protasis and an apodosis, and the truth value of the SoA in the apodosis is contingent on the truth value of the SoA in the protasis. The apodosis has a future time reference relative to the protasis. The irrealis is encoded by use of the p-stem in both parts of the sentence:[18]

kān + p-stem	p-stem
protasis	*apodosis*

On the other hand, the counterfactual conditional clause does not have any factual truth value. Since the condition expressed by the SoA in the protasis has not been met, the main apodosis clause is false. In Jewish Gabes, counterfactual clauses have the following structure:

	s-stem form of the verb 'to be'
kān + s-stem	+ p-stem verb form
protasis	*apodosis*

[18] Although the Bedouin dialect of Nifzāwa, spoken in the south of Tunisia, often features the s-stem in the protasis (Ritt-Benmimoun 2020), I have not found any examples of this construction in my corpus. This could potentially point to language contact with Israeli Hebrew, where the p-stem in the protasis of the irrealis is the norm.

However, they can also occasionally have the structure exemplified by passage (6):

kān + s-stem	s-stem verb form
protasis	*apodosis*

It seems that, in the latter type, the main clause bears some degree of probability, albeit very low. The perfective form in example (6) apparently signals that the woman still has some hope of saving the man, although she is aware of his terminal condition. This use of the perfect to express low-likelihood SoAs is attested also in Biblical Hebrew (Givón 1990, II:334; 1997).

1.3.6. Clauses of Reason

1. *ənti ʕala xāṭəṛ ṣāḥbi āna nʕāwnək*
   'Because you are my friend, I will help you.'
2. *ma mšāš l-xadma ʕala xāṭəṛ ṃṛīḍ*
   'He did not go to work because he was sick.'
3. *hīya habṭət lūṭa, u l-bīt krātha xāṭəṛ xāyba mātu fīha bərša ẓġār*
   'She went down and rented the room because it was bad, too many children had died in it.'
4. *l-wəld ḥrəq rūḥu, xāṭəṛ šāf ša ʕamlu fi-ruṣalaym*
   'The son burnt himself because of what they had done in Jerusalem.'
5. *āna ma žəlt ma ʕarrəštṣ mʕāha li ma ʕṭītīkṣ l-mahar* (2:88)
   'I have not married her yet because I did not give you the mahr.'

This type of adverbial clause combines two SoAs connected through the logical relation of cause and effect. The dependent SoA expresses the reason for the occurrence of the main one. In Jewish Gabes, the reason relationship is expressed through *xāṭəṛ* or *aʕla xāṭəṛ*, or through the explanatory particle *li*. The former

is widely used across the North African dialects and is attested, among others, in Jewish Tripoli (Yoda 2005, 263). As the above examples demonstrate, no co-subordination occurs in this type of adverbial clause.

Typologically and semantically, reason subordination is related to 'when' and 'after' temporal clauses, in the sense that both of them are causally related. Moreover, the dependent SoA of a reason clause, just like that of a temporal clause, is factual. For this reason, many languages code both types of subordination with the same morphology. Cristofaro (2012, 162) presents the example of the Greek particle *hōs*, which in the Homeric language coded purpose and 'when' clauses, whereas in Classical Greek it was extended to express relations of reason too. In Jewish Gabes, the factual value of the dependent SoA is signalled by elision of the verb 'to be' before predicative adjectives. While example (1) is referring to the present, and the dependent clause in example (2) could refer to both past and present, example (3) has clear past reference.

1.3.7. Clauses of Manner

1. *rākəb ʕal əl-bhīm u rəžlīn fi-lūṭa* (7:34)
   'He rides the donkey with his legs on the floor.'
2. *baʕd təšʕ u arbʕīn ykəmmlu l-*[HE]*ōmər*[HE] *u yaʕlqu l-məlḥ*
   'After forty-nine days they would complete the Omer by hanging the salt.'
3. *yḍūṛu fi-l-blād wa yšūfu kīfāš əl-ʕbād yʕīšu*
   'They would patrol the city, looking at how people live.'
4. *hūwa yxayyəṭ wa yqīm ṛāṣu fūq*
   'He sews raising up his head.'

Manner constructions consist of two SoAs, the dependent SoA indicating how the main one is executed. In Jewish Gabes, this construction is expressed by means of coordination. Unlike in the majority of other adverbial clauses, in manner constructions, the main SoA comes first, before the dependent one.

1.3.8. Concessive Clauses

1. *ma xašlətš əl-fxār u āna ṭḷəbt mənha bāš taxšəl*
   'She did not wash the dishes even though I asked her to do so.'
2. *ḥatta kān l-ṃṭar əqwīya, məlžūm ʕalīna nəṭḷʕu mən əḍ-ḍāṛ*
   'Although there was heavy rain, we had to leave the house.'
3. *kānət ṃṛīḍa bərša u qāmət (qadrət) təlləf bi ẓġārha*
   'Despite her severe illness, she made an effort to take care of her children.'

Concessive adverbial constructions consist of two SoAs which are linked by a relationship of opposition. The dependent clause expresses circumstances that theoretically should have prevented the occurrence of the main clause, but the event nevertheless takes place, as in examples (2) and (3); or the dependent clause theoretically should have brought about the occurrence of the event in the main clause, but it did not take place, as in (1). Therefore, the dependent SoA is always factual. In Jewish Gabes, the concessive relation can be expressed either coordinatively, as in examples (1) and (3), or through the concessive particle *ḥatta*.

1.3.9. Summary

To sum up the syntactic behaviour of adverbial constructions in Jewish Gabes, several points should be made. The primary strat-

egy used in the dialect is balancing, although some degree of deranking can be identified as well, since the verb in some dependent clauses (e.g., purpose clauses) cannot admit verbal particles (e.g., the /ka-/ particle indicating a continuous action). The semantic classification based on Cristofaro's model has been expanded by several additional categories. Special attention was paid to the distinction between subordination and coordination. As I have shown, some adverbial constructions—like, for example, clauses of manner and concessive clauses—show a strong tendency towards coordination.

1.4. Complementation

In my investigation of complementation in Jewish Gabes, I shall apply the following definition of complementation, proposed by M. Noonan (2007, 52): "the syntactic situation that arises when a notional sentence or predication is an argument of a predicate." In other words, complementation provides information which is necessary for conveying the full meaning of a sentence. In this respect, complement clauses differ from those types of subordinate clauses that provide additional information without which the sentence would remain grammatically correct. Modern studies try to avoid defining complementation in terms of embedding, since, in many languages, complementation can take place without formal embedding (Cristofaro 2012, 96).

1.4.1. Typological Preliminaries

Numerous historical studies of various languages indicate that complementation derives from non-embedded, apposition-like

structures involving nouns and pronouns (Noonan 2007, 57). In this kind of construction, which was particularly common in the early stages of development of Indo-European languages, the main clause contained a pronominal element, while the dependent clause presented further specification about it and was connected to the main one through a resumptive pronoun.

The morphology of complements varies from one language to another and can be coded by means of different grammatical categories; nevertheless, several types can be distinguished cross-linguistically. The most common type is a sentence-like complement, which can have two kinds of form. The first one behaves like an independent sentence, and the predicate is in the indicative mood. The second type involves subjunctive forms, which are morphologically distinct from the indicative ones and, in virtually all languages, can stand in an independent sentence in several grammatical contexts (imperative, cohortative, irrealis, etc.). The subjunctive often conveys a sense of doubt and therefore accompanies negated main clauses. This is exemplified by the usage of the particle *by* in Russian, or the distribution of subjunctive forms in negated sentences in Spanish. Complements may be preceded by a complementiser, but some languages convey complementation by means of parataxis and verb serialisation, a method that is particularly common in sub-Saharan languages. Moreover, a single grammatical form can serve as a complement, e.g., an infinitive or a participle. The former, depending on the language, can code a variety of SoAs. In Ancient Greek, infinitives express a full range of tenses, while in Slavic languages, they are coded for aspect and voice (Noonan 2007, 68).

Syntactically, complements can function as subjects or objects of the matrix clause. There is a number of phenomena related to the syntactic behaviour of complements. Some of the most common of them will be mentioned here. Firstly, many of the world's languages make use of what Noonan (2007, 75) calls 'equi-deletion' (henceforth: equi). As a result of this process, a predicate argument of the complement clause is deleted when it is co-referential with the matrix, and the complement becomes of non-sentence-like type. Equi is found mostly in languages where the use of an overt subject is necessary, and therefore will not take place in those that code the subject by means of verb morphology. On the other hand, the phenomenon by which, despite the deletion of an independent subject constituent, the complement remains a sentence, is called anaphoric ellipsis. Applying this rule to Jewish Gabes, one should expect to find the phenomenon of anaphoric ellipsis rather than equi, since deletion of an overt subject from the complement does not bring about a non-sentence-like constituent.

Another phenomenon that is related to the syntagm of complements and involves deletion of an argument is raising. It entails removing an argument of the predication from the dependent SoA and promoting it to the matrix; as a result, the argument acquires a new grammatical function. This process usually takes place when the raised argument is syntactically part of the complement, but semantically constitutes part of the matrix (Noonan 2007, 79). The most common type of this process is subject-to-object raising, which occurs in desiderative and volitive clauses.

It involves promotion of the subject argument from the dependent SoA in an embedded structure to the direct object of the predicate in the matrix. According to Noonan, raising, similarly to equi, brings about a non-sentence-like complement.[19]

Complement clauses are prone to undergoing various kinds of reduction, of which two deserve special attention. Simple clause reduction takes place in three-place manipulative predicates, where, notwithstanding equi-deletion of the subject of the complement predicate, the complement maintains a grammatical structure independent from the syntagm of the matrix. On the other hand, a process called clause union causes both matrix and dependent clause to share the same grammatical features (Noonan 2007, 83). This process usually involves the merging of both predicates in such a way that all the arguments of the sentence are subordinated to the same syntagm. An example from French can provide further explanation of this phenomenon: *Roger laissera manger les pommes à Marie* 'Roger will let Marie eat the apples' (Noonan 2007, 84). In this sentence, 'let' and 'eat' from a ditransitive predicate, both of them having the same arguments, namely, 'Roger', 'apples', and 'Marie'.

So far, I have discussed morphological and syntactical relations between the matrix and complement clauses. I have pointed out the distinction between indicative and subjunctive forms and briefly described the processes of deletion and raising of comple-

[19] Another type of raising common across world's languages is negative raising, which entails removing the negative particle from the complement and promoting it to the matrix clause (Noonan 2007, 100).

ments. At this point, it should be argued that both the morphology and the syntax of the complements are, to a large extent, governed by the semantics of the matrix predicate, which can in turn produce a number of interconnections between the two clauses. The semantic integration between the matrix and the complement SoAs has been the subject of extensive studies. Givón (1990, 526) has observed that the semantic interconnection between the clauses is stronger when the agent of the matrix controls the realisation of the complement. According to this statement, manipulative predicates will generate stronger semantic correlation with the complement, than, for example, utterance or proposition. Moreover, Givón (1990, 526) has suggested that, due to semantic integration, events from both clauses merge into one spatio-temporal dimension.[20] This view has been called into question by Cristofaro (2012, 119), who adduces a number of cases where, despite spatio-temporal integration, there is no semantic correlation between the clauses.

The semantics of the matrix predicate are the decisive factor also when it comes to the mood and tense reference of the complement. In this respect, the complement predicate is dependent on the matrix when part of the information it conveys is coded by the main predicate (Noonan 2007, 102). The dependency of the complement on the matrix predicate can be threefold.

---

[20] As pointed out by Noonan (2007, 101), the syntax of the complement can also signal the degree to which the clauses are semantically integrated. Sentence-like complements tend to be more independent than reduced ones, which, due to their incorporation into the matrix, represent a higher degree of semantic integration.

The first type of dependency is time reference, which is sometimes also referred to as time predetermination (Cristofaro 2012, 116). With this dependency, the tense coding of the complement predicate is dictated by the meaning of the matrix predicate. Otherwise, the complement can have a tense constituency of its own, in which case it is described as having indetermined tense reference (Noonan 2007, 103). The former situation is exemplified by predicates expressing a wish, order, command, or desire, since the predicate of the following component will always have future reference. On the other hand, knowledge and utterance predicates do not imply any particular time reference for the complement.

Another dimension of clause dependency is truth-value, or epistemic dependency. This means that the epistemic status of the complement clause depends on the level of truthfulness and probability expressed by the matrix predicate. This type of dependency has indetermined tense reference. As has already been mentioned, some languages code the irrealis mood of the complement by means of the subjunctive (e.g., Spanish) or a distinct form of complementiser (e.g., Russian).

In sum, the world's languages utilise various types of morphological and syntactical reduction in complements that exhibit dependency on the matrix clause. This behaviour can be explained through pragmatic concepts, such as syntagmatic economy and information recoverability (Cristofaro 2012, 248). Usually, when mood and tense are not coded by the complement predicate, this information is recoverable from the matrix predicate, and therefore the reduction reflects the tendency to reduce

the complexity of the message. This is also the case when the participant of the dependent SoA is coreferential with the participant of the matrix. Moreover, some of the processes involving merging of the clauses discussed above can be seen as manifestations of aspects of iconicity, namely iconicity of independence and iconicity of distance (Givón 1980; Cristofaro 2012, 251). According to the former, linguistically independent forms represent independence of the concepts that the forms code. Similarly, iconicity of distance points to the correlation between formal distance between forms and their conceptual distance. In light of these statements, it becomes clear why desiderative and modal predicates tend to bring about merging of the clauses by means of raising, namely, the will of the agent and the target of his/her will are conceptually interconnected.[21] On the other hand, utterance predicates almost always involve use of a complementiser, because the act of speaking and its content are not related conceptually.

1.4.2. Complementation in CA

In the previous section (§1.4.1), it was pointed out that the world's languages code complement dependency by means of different syntactical and morphological devices. In what follows, I

[21] In CA, this correlation is exemplified by, among others, interchangeability between the complementiser *ʔan al-maṣdariyya* and the actual *maṣdar* in desiderative clauses whose matrix and complement have coreferential subjects. In this case, the conceptual closeness between the wish and its content is expressed by a reduced, nominalised form of the complement (LeTourneau 2011).

shall briefly discuss forms of complementation present in CA. The grammarians distinguish three types of complementiser in CA, each of them being associated with different semantic values of the complement.[22] The first one, *ʔanna*, follows propositional predicates denoting factual assertions, and therefore the tense reference is often past (Wright 2005, II:26). The predicate in the complement is in the indicative, while its subject is in the accusative case. The second kind of complementiser is *ʔinna*, which occurs exclusively after the utterance predicate *qāla*. Finally, the third type, namely *ʔan*, has a twofold usage. It can follow predicates expressing order, necessity, duty, permission, etc., and in this case, the predicate in the complement clause is in the subjunctive. The tense reference of the complement is therefore future. On the other hand, *ʔan* can also accompany emotive or knowledge predicates, in which case the reference can be present or past, and the complement predicate is in the indicative. Traditionally, the former is called *ʔan an-nāṣibatu* 'the *ʔan* that governs the subjunctive' and the latter is called *ʔan muxaffafa* 'the lightened *ʔan*' (LeTourneau 2011).

It can be inferred, therefore, that the semantics of the matrix predicate in CA are the factor that conditions the syntactic behaviour of the complement. On this basis, one would expect to find in CA the syntactic processes described in §1.4.1. Indeed, Persson (1999), in a study of complement-taking predicates in Arabic, observes that raising occurs when the agent of the matrix

[22] Some linguists add to the list of the CA complementisers also *allaði* since it appears in the expression: *al-ḥamdu li-llāhi llaḏī* 'God be praised that…' (Spitaler 1962).

is able to control the way the agent of the complement acts. This proves that there is a strong relationship between the type of predicate in the matrix and the form of the whole complement sentence.

1.4.3. Semantic Taxonomy of Complement-Taking Predicates[23] in Jewish Gabes

In the previous sections (§§1.4.1–1.4.2), it has been repeatedly highlighted that there is a strong correlation between the semantics of a complement and its syntax. As has been observed by Givón (1990, II:40), the isomorphism of these two dimensions gives rise to clause union and event integration, which in turn significantly affects the syntax of the entire sentence. Bearing in mind the importance of the semantics of the matrix predicate, in what follows, I shall categorise the passages containing complements according to the meaning of the complement-taking predicate (henceforth: CTP). They have been taken from the text corpus and from questionnaires.

Noonan (2007, 121), in his cross-linguistic study on complementation, proposed a very detailed taxonomy of CTPs appearing in various languages. Some of them are only sporadically attested and do not demonstrate any syntactic peculiarities. Hence, I will follow rather the model proposed by Cristofaro

[23] Following Noonan (2007, 121), henceforth, the abbreviation CTP will be used.

(2012, 99), which outlines the most common categories, with some minor modifications.[24]

1.4.4. Modal

1. *lāžəm nšūfu šnūwa ʕandu fi-l-bīt* (4:91)
   'We must see what he keeps in his room.'
2. *ġadwa əl-mélex fi-šətta tāʕ ṣbāḥ lāžəm yətmašša ʕal ṣəṭṭ l-bḥar* (7:75)
   'Tomorrow at six in the morning the king is supposed to take a stroll on the beach.'
3. *muš lāžəm nəḍfnūha* (4:79)
   'We cannot bury her.'
4. *tnəžžəm tədxəl tuwwa*
   'You can enter now.'
5. *ma ynəžžmūš yədxlu ʕla xāṭər ma ʕandhumš əl-məftāḥ*
   'They cannot enter because they do not have the key.'
6. *məlžūm ʕalīya bāš nəmši əl-yūm l-ṭḥīb*
   'I must go to the doctor today.'
7. *baʕd ma tkaṣṣrət rəžlu tuwwa ma ynəžžəmš yəmši ʕalīha*
   'After he broke his leg, he cannot walk yet.'
8. *ḥatta kān l-ṃṭar əqwīya, məlžūm ʕalīna nəṭlʕu mən əḍ-ḍāṛ*
   'Although there was a heavy rain, we had to leave the house.'
9. *yəlžəmha ṭṭaḅḅaṣ bāš tədxəl* (4:16)
   'She had to lean down to enter.'

---

[24] Givón (1990, II:41) proposes an even more general classification of CTPs, outlining three main categories: modality verbs, manipulation verbs, and perception-cognition-utterance (PCU) verbs.

It is widely recognised by linguists that there are two main distinct types of modality (Comrie 1985; Givón 1990 II, 52; Cristofaro 2012, 60). The first is epistemic modality, which refers to the speaker's degree of commitment to the truth of the proposition. The other is deontic modality, which conveys obligation or permission regarding an event as yet unrealised. A third type relates to ability and is sometimes termed dynamic modality.

As the above passages demonstrate, Jewish Gabes utilises three different ways of conveying modality. The distinction between ability and obligation is clearly marked lexically and syntactically. Thus, the former is expressed by means of conjugated verbal forms of the root /nžm/.

Obligation, on the other hand, can be conveyed in several ways, depending on the nature of the obligation. The first one involves an uninflected particle *lāžəm* and is used when the subject feels an internal need or moral obligation to perform the action expressed by the complement.[25] However, as example (2) demonstrates, the particle in question also has another usage, namely, it can introduce an event that is highly likely to occur. In example (2), *lāžəm* does not denote a personal need or obligation of the king to walk, but rather indicates that this is what he usually does, or what he has planned, and it is therefore reasonable to assume that tomorrow he will walk on the seashore. This, therefore, expresses epistemic necessity.

[25] This uninflected particle is widespread in modern varieties of Arabic. It has been attested, among others, in Gulf Arabic (Holes 1990, 201) and in Ṣanʕānī Arabic, where it can occur in a hypotactic construction with the complementiser /innih/ (Watson 1993, 160).

Apart from the particle *lāžəm*, obligation is expressed also by means of a construction involving the passive participle *məlžūm* and the inflected preposition *ʕal*.[26] However, unlike *lāžəm*, which denotes the personal obligation of the subject, this construction is used when the subject is forced by a third person to perform the action conveyed by the complement, or when the obligation is conditioned by external factors. Thus, in example (6), the subject is forced to go to the doctor by their health condition. Similarly, in example (8), the subject does not feel an independent and personal need to leave, but rather is forced by external conditions.

Example (9) presents yet another way of expressing obligation. It involves the 3MS form of the root /lžm/ followed by a direct object pronoun. In this construction, the verb form is impersonal and the subject who is obliged to perform the action expressed by the complement is coded by the direct object. Jewish Tunis supplies numerous examples demonstrating the syntactic behaviour of this form:[27]

(1) *mṛa* ***yəlzəmha*** *taʕməl fonctions tāʕ ṛāžəl*
‘une femme (…) doit remplir les fonctions d’un homme’

(2) *əlli umān «ḥəšbūn īš» u* ***yəlzəmma*** *taʕməl əl-fonctions ntāʕ ṛāžəl*
‘qui est le compte de ʔiš et doit exercer les fonctions d’un homme’

(3) *wəl-fonctions ntaḥḥa* ***yələzmməm*** *yəbdāw doubles*
‘et dont les fonctions vont être doubles’

---

[26] In Jewish Tunis, there exists also the variant *lāžəm ʕal* (Cohen 1964, 48). However, this has not been attested in Jewish Gabes.

[27] All the examples have been borrowed from Cohen (1964, 48-60).

(4) *ma **yəlzəmnāši** bāš baṛmənnām baṛmənnām nqūlu lli isṛaīl zāda ġalṭīn*
‘nous ne devons pas dire que Israël est dans l’erreur’

(5) *flān **yəlzəmə̄lna** nuqfūlu, ulā flān «baṛmənnām baṛmənnām nəfṭāṛ» **yəlzəmna** bāš nūqfu fi rīgla-lli-īya **tə̄lzəm***
‘nous assurer la défence d’un tel, ou bien, helas, un tel est décédé, nous devons nous mobiliser pour telle chose qui est nécessaire’

The semantic value of this construction is by no means homogenous. The first three examples illustrate an obligation being the result of external circumstances. Thus, the subject is involuntarily forced to perform the action expressed by the complement. On the other hand, in examples (4) and (5), *yəlzəm* denotes an obligation that is dictated by morality. The subject is not forced to undertake an action, but is required on a personal level to act in a certain way. Nonetheless, as can be inferred from the above passages, *yəlzəm* never represents an internal, personal need of a subject. Its primary function is hence to denote external obligation.

1.4.5. Phasal

1. ***bdāt təmši** təmši təmši* (4:16)
‘She started walking, she walked, and walked.’

2. *təḍṛəblu fi-rəžlīh mən lūṭa ḥatta əl-ṛāẓəl **bda yətḥarrək** wa dəmmu **bda yəẓṛi*** (2:23)
‘[She] started hitting his feet from beneath until the man started moving and the blood started running in his body, he stood up on his feet and started walking.’

3. *humma **wəqfu yəbnīw** əl-ḍāṛ*
‘They stopped building the house.’

4. ***əržaʕt naxdəm*** *kīf ma kənt aqbəl*
   'I continued working as I worked before.'
5. ***kəmməlt nṭəyyəb*** *əl-marqa*
   'I finished cooking the soup.'

The function of phasal predicates is to mark the point in time when the complement SoA is happening. Thus, it can express either the onset of an action, its continuation, its cessation, or its termination. Unlike aspectual operators, phasal predicates do not modify the temporal constituency of the complement predicate (Siewierska 1991, 118; Cristofaro 2012, 102). This assumption is confirmed by example (3), where the reference being made is only the suspension of the construction and not its temporal aspect. In other words, we learn about the development of the construction with reference to its own time-frame, but there is no information about when this SoA takes place.[28]

Jewish Gabes utilises several verbs to express the phase in which the dependent SoA is:

onset	**continuation**	**cessation**	**completion**
bda	*ržaʕ*	*wqəf*	*kəmməl*

It is worth noting that the verb *ržaʕ* 'to come back, to return', in other dialects of Arabic, codes different temporal categories. While, in Jewish Gabes, it means to come back to the point where

[28] The distinction between internal and external temporal constituency is coded by different grammatical categories. As has been observed by Siewierska (1991, 118), external time reference is rendered by adverbs or other aspectual operators, which place certain SoAs on a timeline. Contrary to this, phasal predicates code only internal progress of the SoA, and therefore cannot be regarded as aspectual operators.

the action was suspended, and therefore 'to continue', in Moroccan Arabic, it designates a start of the action (Brustad 2000, 215). On the other hand, in some varieties of Syrian Arabic, it denotes a repetitive action.[29] Interestingly, due to language contact, the iterative meaning of *ržaʕ* has also been adopted in the Western Neo-Aramaic dialect of Maʕlūla, where it occurs in the asyndetic construction *rkʕ* + verb (Correll 1978, 83).[30]

The time reference of the complements is predetermined by the matrix predicate (Noonan 2007, 139). Since phasal predicates indicate a stage of an action, and not a punctual event, complement predicates always have a prefix form.

1.4.6. Manipulative

1. *hūwa* ***ṭḷəb*** *mənni bāš nəmši bə-šwīya*
   'He asked me to walk slowly.'
2. *hūwa li* ***xallāha*** *bāš təqṭəl ṛāẓəlha*
   'It is he who made her kill her husband.'
3. ***ḍabbərt*** *ʕalī bāš yšəlləfha flūš*
   'I convinced him to lend her money.'
4. *hūwa* ***ġaṣṣaḅha*** *bāš tākəl*
   'He forced her to eat.'

Manipulative CTPs can be divided into two principal groups: (1) expressions of causation (force, make, persuade) and (2) expressions of request (ask, order, request, command). Within both

[29] Other varieties of Syrian Arabic, like, for example, the dialect of Damascus, utilise the verb *ṛaḍḍ* (Grotzfeld 1965, 90).

[30] I am indebted to Dr Ivri Bunis for providing me with the comparative data from the dialect of Maʕlūla.

those groups, the agent causes an affectee to perform the action expressed by the complement. Similarly to phasal predicates, manipulative CTPs also have predetermined time reference, since the complement SoA always takes place after the matrix predicate.

In Jewish Gabes, manipulative predicates are followed by the particle *bāš*, due to the lack of coreference between the matrix and the complement subjects. Example (1) represents a request predicate, while the other examples fall within the category of causation.

1.4.7. Desiderative

1. *tuwwa bnīwli qṣaṛṛ qbal ḍāṛ ḅāḅāy, xīr mən tāʕu, u* ***nḥabba*** *ṣahrīn takməl* (2:82)
   'Now build me a castle in front of my father's house, even better than his, and I want it to be finished within two weeks.'
2. *hūwa* ***yḥabb*** *yaʕrəf šnūwa ləwwḥat* (2:32)
   'He wanted to know what she had thrown.'
3. ***tḥabb*** *tədxal ənti*? (2:58)
   'Would you like to go in?'
4. *tuwwa* ***nḥabbək*** *tqūlli škūn hādi li qāʕda tfaššərlək fi-ḥwāyəž hādi kulla*
   'Now I want you to tell me who this person is, who explains all those things.'
5. *āməš* ***ḥabbītək*** *tži tʕāwənni*
   'Yesterday I wanted you to come and help me.'
6. *qāl: āna* [HE]ʕanī [HE] *u əl-xabža* ***nḥabb*** *nākəlha* (1:19)
   'I am poor and I would like to eat the bread.'
7. *ma ḥabbūš yqūlūla qatlū l-ʕaṛāb*
   'They did not want to tell her that the Arabs had killed him.'

Desiderative CTPs express a wish for the realisation of an action conveyed by the complement predicate. Either the subject of the matrix predicate may be coreferential with the experiencer of the complement, or the dependent clause may be brought about by a third person (Cristofaro 2012, 103). The time reference of desiderative predicates is predetermined, and the complement predicate always has future meaning.

In Jewish Gabes, the verb associated with this class is invariably *ḥabb*. As examples (1), (4), and (5) demonstrate, *ḥabb* very often brings about raising of the subject from the complement clause to the position of the direct object in the matrix. According to Noonan's (2007, 79) definition, one of the outcomes of raising is a non-sentence-like complement type. However, in light of the data from Jewish Gabes, this assumption turns out to be inadequate. Without doubt, raising takes place, since the argument of the lower clause is promoted to the higher one, but the complement remains a sentence-like type. Example (5) is equal to: *āməš ḥabbīt tži tʕāwənni*, where the subject of the complement predicate, coded by verbal inflection, is in the nominative case. Once raising is applied, it is coded by a pronominal object suffix. Nonetheless, the promotion of the argument does not affect the grammatical independence of the complement.

1.4.8. Perception

1. *āna wəld ṣəḷṭān, **šmaʕt** li taʃməl ʕarš tāʕ bəntək* (6:91)
   'I am a son of the sultan and I have heard that you held a wedding for your daughter.'

2. ***šmaʕt*** *tədwi wāḥda u baʕd dənya šəktət wa rqītha mīta* (4:77)
   'I heard a woman talking and then everything became silent and I found her dead.'
3. *f-əl-līl* ***šmaʕtu*** *yətkəlləm mʕa əẓ-ẓāṛ*
   'At night I heard him talking to the neighbour.'
4. *əl-ḅūlīṣi* ***šāf*** *əl-xannāb kīf ṭlaʕ mən əl-*[HE]xanūt[HE]
   'The policeman saw the thief escaping from the shop.'

Perception predicates are applied in sentences where the subject witnesses, by hearing or seeing, an event coded by the complement. Their tense reference is predetermined, since the act of perception takes place at the same time as the event itself (Noonan 2007, 142). In Jewish Gabes, as in many other languages, the subject of the complement predicate is coded as the direct object of the CTP. The complement predicate is, in the majority of the examples, in the prefix conjugation, indicating the durative character of the verb.[31] Example (4) is an exception to this rule, as the dependent predicate is punctual and thus the perceived SoA is coded by the suffix inflection. Somewhat problematic is example (1). Lexically, it belongs to the perception category, since it includes the verb 'to hear', but the form of the complement suggests that it could also be classified in the next group, namely, CTPs of knowledge.

[31] Due to the immediate and durative character of the act of perception, it is common across the world's languages to code the complement predicate with a participle (Noonan 2007, 142).

1.4.9. Knowledge

1. *l-kbīra taʕrəf li ma ʕandhāš šəmm wa əẓ-ẓġīra taʕrəf li ḥaṭṭətla* (4:121)
   'The old one knew she did not have any poison and the young one knew she did give her poison.'
2. *l-bnāt ʕarfu li ma ʕandīš ġləmm*
   'The girls learnt that I did not have livestock.'
3. *yəšhədu ʕalīya ənžūm u šma li āna žītək* (5:40)
   'My witnesses the moon, the stars and the sky that I have come.'

Knowledge CTPs indicate either a state of knowledge, or the process in the course of which the subject acquires certain knowledge. In Jewish Gabes, the same verb *ʕrəf* expresses both possibilities. Example (3), which contains the verb *šədd* 'to witness', has been classified in this group, since the act of witnessing represents a level of knowledge. Both *ʕrəf* and *šədd* are followed by the complementiser *li*, which nominalises the complement.

1.4.10. Propositional Attitude

1. *ʕandək əl-ḥaqq li ṣahrīn ma mšītš, nəmšīlo* (5:10)
   'You are right that I have not gone to him for two months, I will go to him now.'
2. *āna fi-bāli əlli hūwa mūš ḥabb yərbaḥ*
   'I think he is not going to win.'

Through propositional CTPs, the subject expresses an evaluation of the content conveyed by the complement. Since this evaluation usually pertains to the truth of the dependent clause, the matrix predicate will involve verbs relating to thinking, believing, expressing opinion, etc. In Jewish Gabes, this class is scarcely attested, and comprises two expressions, both of them followed by

the complementiser. Their time reference is undetermined, since the complement of example (1) refers to the past, and that of example (2) to the future.

1.4.11. Utterance

1. *hūwa qālli ʕamru ma yəržaʕ əl-hūni*
   'He told me that he would never come back to this place.'
2. *āna qatlu ma ʕātəš təmma məlžūm bāš tbəddəl šəlha*
   'I told him that it was not possible to change the stock.'

Utterance predicates describe a process of transferal of the information which is coded by the complement. As pointed out by Cristofaro (2012, 121), the transferred information can be expressed in the form of either direct or indirect quotation. The vast majority of utterance predicates in Jewish Gabes function within direct discourse, and therefore cannot be analysed in terms of complementation. Both of the examples presented above have been obtained by means of a questionnaire. It is worth noting that no complementiser occurs in them, and as a matter of fact the dependent clause has a form similar to that of direct speech.

1.4.12. Emotion

1. *farḥat mərṭ ḅūha li žāt* (4:66)
   'The step-mother was happy that she came.'
2. *āna nādəm əlli ma ʕāwəntūš waqt əlli kān ṃrīḍ*
   'I regret that I did not help him when he was sick.'
3. *āna ġlat li ma qbəltš əl-xadma hādi*
   'I am sorry that you have not got this job.'

This category is not included either in Cristofaro's model or in Noonan's.[32] Predicates of emotion express an emotional attitude of the subject towards the SoA expressed by the complement. Their time reference is not predetermined. In Jewish Gabes, they attract the occurrence of the *li-əlli* complementiser.

1.5. Summary

After analysing the three types of subordination, some conclusions can be drawn regarding the coding of dependency in Jewish Gabes. Throughout the course of my investigation, two dimensions were considered—a cross-linguistic and a Semitic one. The latter was aimed at demonstrating the origins of relative and adverbial clauses. The former approach, on the other hand, was applied in order to place Jewish Gabes within a wider typological framework.

I have argued that relative clauses in Jewish Gabes are of an external, post-nominal type and can be either restrictive or non-restrictive. Historically, they derive from the pattern of nominal dependency, similarly to adjectives and adverbial clauses. As in many other modern Arabic dialects, the syntactic behaviour of relative clauses in Jewish Gabes is, to a large extent, dependent on the definiteness of the head noun. It has been demonstrated that definite nouns attract the relative pronoun and bring about resumption in the relative clause. On the other hand, when the relativised item is indefinite, relativisation tends to be realised by means of coordination or asyndetically. Finally, my data have

[32] Noonan's model includes, however, predicates of fearing: see Noonan (2012, 130).

confirmed the accurateness of the Accessibility Hierarchy, demonstrating that subject and direct object are the two most relativised positions in Jewish Gabes.

The investigation of adverbial clauses provided a thorough presentation and taxonomy of data. It was argued that, historically, Semitic languages used nominal dependency to express adverbial relations, and at a later stage, some grammaticalised nouns started serving as adverb markers. The data analysis involved six semantic groups of adverbial clauses in Jewish Gabes. Special attention was paid to temporal clauses. I utilised the model proposed by Givón (1990, II:330) and Kortmann (1997, 80), which allowed me to demonstrate different aspects of temporal dependency. In addition, I argued that some clauses use coordination in order to render adverbial relations. This was the case in some temporal clauses, as well as clauses of manner and concessive clauses.

The analysis of the third type of subordination, complementation, was primarily concerned with syntactic phenomena caused by the semantics of the matrix predicate. I argued that the meaning of the main predicate to a large extent conditions the syntagm of the complement. From a historical point of view, it was demonstrated that CA utilises three types of complements depending on the semantics of the main predicate. Subsequently, a semantic taxonomy of complement-taking predicates was presented. Each class of complements has been classified with respect to tense predetermination. I have argued that Jewish Gabes makes a clear distinction between deontic and epistemic modal-

ity. Moreover, I have shown different ways of expressing obligation in the dialect, involving the particle *lāžəm*, *məlžūm ʕal*, and *yəlžəm* + personal pronoun. Finally, it has been demonstrated that some types of predicate, like for example desiderative predicates, bring about raising of the complement subject to the position of the direct object of the matrix predicate.

2.0. Expressions of Tense and Aspect

2.1. Introduction[33]

There is a general scholarly consensus that the verbal system of modern Arabic dialects incorporates both aspect- and tense-coding devices (Eisele 1991, 193; Brustad 2000, 203).[34] Indeed, these two categories are inextricably linked, and both play a part in expressing events. However, Brustad (2000, 202), after comparing data from several dialects, reaches the conclusion that it is aspect that prevails in the verbal system of spoken Arabic, and indicates that separate mechanisms are used to convey time. This might give the impression that all Arabic dialects code aspect and tense in the same way. Unsurprisingly, this is far from correct. The dialects in fact display immense differences in their verbal

[33] This section is a modified version of my paper: 'Expressions of Tense and Aspect in the Tunisian Varieties of Arabic: A Comparative Study of Jewish and Muslim Dialects' (Gębski 2022).

[34] It is worth noting that the debate on the nature of the verbal system is not limited only to Arabic. The puzzling relationship between tense and aspect seems to be one of the most frequently discussed issues in scholarship on Semitic languages, the best example being Biblical Hebrew.

syntax (use of participles, preverbal particles, auxiliary verbs), which, in turn, have a significant impact on the coding of the two categories in question. The aim of the present study, therefore, is to present a thorough investigation of the relationship between tense and aspect in Jewish Gabes, and of its wider context in relation to other Arabic dialects. Comparative material has been excerpted from Jewish Tunis (Cohen 1964, 1975), Muslim Tunis (interview with an informant), ʕAulād Msalləm (Simeone-Senelle 1985), the Bedouin dialect of Douz in Southern Tunisia (Ritt-Benmimoun 2011; 2014), and Jewish Tripoli (Yoda 2005). The introductory remarks include a short presentation of the verbal system of Jewish Gabes, as well as discussion of the origin of the /ka-/ preverbal particle. In §2.7, I demonstrate that the p-stem and the s-stem in Jewish Gabes are mostly aspectual, and their temporal value is conveyed by external elements. Subsequently, I discuss the expressions of the perfect in modern Tunisian dialects, where, as will be shown, there are salient functional divergences between the Jewish and Muslim varieties. I provide an explanation of this phenomenon involving a North-West Semitic substrate underlying the Jewish dialects. The final part of the section (§2.8) deals with the compound forms of the p-stem (*/qāʕd/*, */qāʕ/*, */ḳ̂a/*, */kān/*, and */ḥābb/*).

2.2. Syntax of Verbs in Jewish Gabes

The structure of the verb phrase in Jewish Gabes comprises the following primary elements: the verb itself, negation particles, and preverbal particles or auxiliary verbs. The inventory of the

last two elements differs from dialect to dialect. This issue will be analysed more closely in the following section (§2.3).

The two basic forms of the verb in Jewish Gabes are called in the present study the s-stem (*fʕəl*) and the p-stem (*yəfʕəl*). Scholars of spoken Arabic have also been known to use the terms perfective and imperfective (e.g., Brustad 2000), the former occasionally being replaced by the term 'perfect' (Eisele 1990, 174). This terminology in Jewish Gabes is not always accurate, especially in light of the distinction between lexical and formal (viewpoint) aspect, and the possible tense-related implications it might bear. Thus, in order to avoid any imprecisions, in what follows, I will be using terminology based on morphology. Moreover, the term 'perfect', in some studies, designates a specific aspectual value coded formally by the active participle (Eisele 1990, 173; Brustad 2000, 142). As will be shown in §§2.7.3–2.7.4, the active participle in Jewish Gabes has limited usage, and fulfils a different function. As regards negation, the dialect in question has two basic patterns: (1) verbal negation, expressed by *mā* verb + /š/ clitic, and (2) predicate negation, expressed by the particle *muš*.

2.3. Distinction between Preverbal Particles and Auxiliaries

The emergence of preverbal particles in any language is closely related to its internal, diachronic processes of grammaticalisation and morphological reduction (Owens 1998, 105). The category of preverbal particles is, in Jewish Gabes, interconnected with that of auxiliary verbs, and it is therefore sometimes difficult to unequivocally draw a distinction between them. Certain verbs

are in the process of a functional ramification, serving on the one hand as fully-fledged, inflected verbal forms, and on the other as frozen particles. Their double nature seems to present some difficulties for the analysis of Arabic dialects. Harrell (1962, 178) classifies under the category of 'auxiliaries' in Moroccan both those items lacking a full conjugation and those with regular verbal forms. Contrary to this, Eisele (1992, 160), when investigating auxiliaries in Egyptian Arabic, sets out four features they display, one of which is obligatory subject coreferentiality among members of the verb phrase. In the present section, following Eisele, a clear distinction between these two categories is made. Thus, lexical items lacking a full conjugation will be classified as preverbal particles, while verbs coreferential with the subject will be grouped under the category of auxiliaries.

2.4. The Origin of Preverbal Particles in Jewish Gabes

Four preverbal particles can be distinguished in Jewish Gabes. They stem from two separate verbal forms, namely, *qāʕəd* and *kān*. The first particle is an uninflected form of the active participle *qāʕəd*. As I shall argue, this form gave rise to a number of clitics, the most obvious being *qāʕ*, which presumably emerged due to the loss of the final consonant. This might have taken place after it underwent devoicing to [t] and subsequent assimilation to the [t] prefix of the 2SG, 3FS, and 2PL.[35] The two other particles

[35] The tendency of the preverbal particles to assimilate to the personal prefixes of the main verb has already been pointed out by Stewart (1998, 117), who gives the example of the Egyptian /bi-/ clitic turning into /mi-/ in the 1PL, i.e., *minākul* 'we are eating', instead of **binākul*.

are /ka-/[36] and *kān*. While the latter is no doubt a grammaticalised form of the 3MS s-stem form of the verb 'to be', the origin of the former is less certain. Two possible paths of development can be proposed. The particle could have emerged due to the loss of the final [n] sound of the form *kān*. Again, this could have been caused by assimilation to the /n-/ prefix of the 1SG/PL. As will be shown later, however, this explanation does not hold water in light of the data. On the contrary, as I shall argue, /ḵ̂ā-/ developed from the participle *qāʕəd*, being the next stage in the development of the particle *qāʕ*.[37]

As reflected in emphasis spread, the sound [q] in Jewish Gabes is the weakest of the emphatic consonants. The sound [q] could therefore have undergone de-emphaticisation, turning into the unaspirated stop [k]. It is also worth noting that, cross-dialectally, the fronting of [q] to the post-velar position, which also reflects its weakness as an emphatic, is one of the characteristic traits of sedentary dialects (Aguadé 2018, 45). Similarly, the realisation of [ʕ] in the dialect is much weaker than in other varieties of Arabic, especially the eastern ones. Instances of the elision of [ʕ] are also attested in neighbouring Jewish Tripoli,

[36] In the transcription, an unaspirated stop is represented as [ḵ̂], its aspirated counterpart as /k/. /k/ in the preverbal particle /ka-/ is always unaspirated, but it is marked as such only when this is relevant for the diachronic reconstruction.

[37] A similar phenomenon of phonetic reduction of a preverbal element is attested in Neo-Aramaic dialects, where the /bət/ particle in the construction *bət-qaṭəl* sometimes turns into /t-/. The parallelism is even more explicit considering that this particle likely originates in the MS form of the active participle of the verb 'to want'.

where one occasionally finds the form *ča*, being a truncated version of the genitive exponent *čāʕ*.[38]

When it comes to the vowel, since the particle always precedes a verbal form and does not constitute an independent entity with its own stress, one can expect length reduction from [ā] to short [a] in the stream of natural speech.[39] Another explanation for the reduction of this vowel could be a de-grammaticalisation of the original verb form. As pointed out by Stewart (1998, 118), some clitics emerge due to the loss of a personal prefix, by which they become grammatically dependent items. In the form *qāʕəd*, the long [ā] vowel is vital for coding the grammatical function of the active participle, and its reduction to a short [a] might therefore be an expression of its syntactic dependence.

In the following paragraphs, I shall present arguments in favour of reconstructing the origin of the particle /ka-/, used to denote progressive events, in the active participle *qāʕəd*. The reconstruction is based on the following phonological processes leading to the emergence of the particle /ka-/ in Jewish Gabes: qāʕəd > *qāʕət > qāʕ > *qaʕ >*qa > ka. It is worth noting

[38] This is an observation made on the basis of my own transcriptions of the recordings from Jewish Tripoli available on the website of the Mother Tongue Project: https://www.lashon.org/en/taxonomy/term/58, accessed 30 Nov 2023.

[39] M. Cohen (1924, 57–58) distinguishes three stages in the formation of a clitic: 1) full word, 2) slightly reduced word, 3) considerably reduced word (e.g., the Levantine preverbal particle *ʕammāl* > *ʕa*).

that the same coexistence of *qāʕəd*, *qāʕ*, and *ka* is attested in Jewish Djerba, as opposed to the Ibadite and Malekite varieties, where only *qāʕəd* is used (Behnstedt 1998, 67).

The process described above involves a number of cross-linguistic phenomena related to language change, broadly understood, which have been under investigation over the past few decades (DeLancey 1997; Bybee 2003; Aarts 2004). Namely, as demonstrated above, the evolution of the active participle *qāʕəd* into a progressivity marker was brought about by the subsective gradience of this form, which, in turn, has led to its reanalysis and subsequent grammaticalisation.[40] Moreover, the sequence of synchronically attested forms, *qāʕəd* > *qāʕ* > *ḵa*, demonstrates that the process underlying this change consists of a number of micro-changes, which represent a gradual development. In other words, the case of the /ka-/ particle and its derivation constitutes a point of intersection between synchronic gradience, and gradualness, which by its nature is diachronic (Traugott and Trousdale 2010, 22). The coexistence in Jewish Gabes of the full verb form alongside the auxiliary and clitics deriving from it therefore offers a unique insight into the dynamics of language change.

---

[40] As explained by Aarts (2004, 361), subsective gradience denotes different levels of membership within the same category (e.g., the adjective and its ability to occur in both attributive and predicative positions). On the other hand, intersective gradience refers to one element having membership of different categories (e.g., some adverbs can mimic the adjective).

2.4.1. The Particle /ka-/ in Other Dialects

The occurrence of the progressive marker /ka-/ is in fact not limited to Jewish Gabes. In a comparative study of a vast variety of Arabic dialects (stretching from Morocco to Iraq) conducted by Agius and Harrak (1987, 164–80), it is argued that numerous dialects from different sub-groups utilise morphological variants of this particle. Agius and Harrak argue that the source of all such particles is the modal participle *qāʕid*. Regarding Moroccan, however, Stewart (1998, 104) calls their claim into question, arguing that the Moroccan particle /ka-/ derives from the perfective form of the verb *kān* used in conditional clauses. Its development from marking conceptual dependency within conditional apodoses to denoting every type of the indicative mood seems to parallel the expansion of the particle /b-/ in other dialects. Owens (2018, 243) argues that the marking of evidentiality with /b-/ was facilitated by its usage in sequences of verbs occurring in narratives. This stage of development is exemplified by Nigerian Arabic. This argument has also been made by other scholars who agree that it was the modal use of the verb 'to be' in conditional clauses that gave rise to the particle /ka-/ (Corriente 1977, 140–41; Hanitsch 2019, 256–58). As argued by Khan (2021), a similar development is evidenced in some NENA dialects, where the construction *bət-qaṭəl*—originally used in the apodosis of conditional clauses—acquired new functions and started denoting discursively dependent events. Khan explains this by means of construction grammar, whereby syntactic spread takes place due to a cognitive schematisation of grammatical constructions.

The model proposed by Stewart and others, which derives /ka-/ in other dialects from the verb *kān* 'to be', does not seem to be plausible in the case of the Jewish Gabes particle /ka-/ denoting the progressive. Rather, Jewish Gabes /ka-/ is more likely to have originated in *qāʕəd*. In support of this, I present two arguments, one phonetic, and the other syntactic. Firstly, within Jewish Gabes, the [k̟] of the particle differs from the [k] in *kān* in terms of aspiration. While the [k̟] of the particle is unaspirated, the [k] in *kān* is conspicuously aspirated [kʰ]. The aspiration of [k] is a widespread phenomenon across Arabic dialects, resulting, in some of them (especially Bedouin dialects of the Gulf and northern Arabia), in further development to [č], e.g., in Baghdadi Arabic (Holes 1991, 655).[41] In Jewish Gabes /k̟a-/, the unaspirated allophone therefore indicates the uvular origin of this consonant.

The second argument is the clear syntactic distinction between the use of *kān* and that of the /ka-/ particle and other forms deriving from *qāʕəd*. Whereas *kān* marks past habitual events and occasionally fulfils a contrastive function (see §2.4.2 below), the latter particles are functionally interchangeable and denote progressivity, albeit with different time references.[42]

---

[41] In some dialects, for example in the Arabic spoken on the south coast of Iran, the affrication of the fronted [k] takes place only in the environment of front vowels, e.g., *samač* 'fish' (Leitner 2021, 230). It is worth noting, however, that the affrication of both [k] and [g] is a feature of Bedouin-type dialects and does not take place in the sedentary ones.

[42] This issue will be further discussed in the analysis.

2.4.2. Origin and Distribution of the /kān/ + p-stem Construction

The function of *kān* in Jewish Gabes is relatively similar to its function in CA. According to Marmorstein (2016, 68), the auxiliary *kāna* in CA functions as a temporal adapter, which expresses anteriority of the predominantly aspectual predicate. In addition, as pointed out by Nebes (1982), it denotes the past tense in instances where the time reference cannot be retrieved from the context. Jewish Gabes utilises both *kān* as a frozen form of the verb 'to be', i.e., a preverbal particle, and a fully conjugated form, i.e., an auxiliary, from which the frozen form originates. Both mark past habitual events. This development could be interpreted as the first stage of the cliticisation of the verb 'to be'.

It therefore appears that, in Jewish Gabes, two separate developments led to the emergence of two distinct particles, i.e., /ka-/, from *qāʕəd*, which marks progressive events; and *kān*, which denotes past, predominantly habitual events. The distribution of these particles will be analysed in greater detail below.

2.5. Aspect and Tense: Theoretical Remarks

The relationship between tense and aspect in some languages can be confusing, leading to imprecise conclusions.[43] It is crucial, therefore, to draw clear distinctions between the two categories

[43] As pointed out by Comrie (1976, 94), there is a conceptual and terminological confusion of these terms in scholarship on Romance languages. The weakness of the terminology has also been observed by Eisele (1991, 76) and in Woidich's (1975) study on active participle forms in Cairene Arabic.

and precisely define their domains. In what follows, I shall briefly present the terminology used in this section; I shall first define aspect and subsequently contrast it with tense.

2.5.1. Aspect

Aspect can be generally defined as the shape of the event expressed by a verb.[44] It indicates the character of the state of affairs and its internal temporal constituency, i.e., whether an event was punctual or durative (Comrie 1976, 3). Various types of aspect are expressed by binary oppositions used to characterise events.[45] A situation can therefore be viewed as perfective, i.e., temporally bounded, or as imperfective, i.e., expressing duration in time without indicating whether it ended or not (Forsyth 1970, 347). The distinction between these two categories also entails consideration of the way in which they are presented. The perfective presents the situation as a whole, while the imperfective focuses on its phasal nature and sees it from within (Comrie 1976, 16). Although no unequivocal definition of aspect exists, it may be tentatively assumed that, cross-linguistically, the imperfective is associated with continual, habitual, and generic meaning, while the perfective has punctual, iterative, and resultative

[44] For the history of scholarship on aspect and the questions it poses, see Binnick (1991, 135–58).

[45] As argued by Sasse (2002, 201), there is presently a scholarly consensus that the common denominator of various aspectual distinctions is the notion of 'boundaries', i.e., the same event can be perceived as having endpoints, or as being temporally unbounded.

connotations (Binnick 1991, 156). In addition, aspect can be divided into two subgroups, namely, formal aspect and lexical aspect (Sasse 2002, 203).

Formal aspect is expressed by the morphology of the verb. In other words, it is the strategy by which the conjugation codes a situation as perfective or imperfective. As pointed out by Eisele (2011), Arabic verb morphology, in contrast to, for example, Slavic languages, is rather poorly equipped for aspect marking. Most of the information about the temporal specification of the situation is provided by external elements—preverbal particles, auxiliaries, and the context of the sentence. Formal aspect is sometimes also called 'viewpoint aspect', as it expresses the way in which a speaker views the situation. Two main types of this formal aspect can be distinguished, i.e., perfective, which views an event from the outside, and imperfective, which depicts it from within.

In contrast to formal aspect, lexical aspect is not grammaticalised, but is expressed by the meaning of the verb itself. A synonymous term used in the literature is Aktionsart, i.e., type of action (Comrie 1976, 6; Eisele 1990, 190; Forsyth 1991, 20; Brustad 2000, 165). Lexical aspect is therefore an inherent semantic feature of a verb. As one might expect, verbs can be divided into multiple semantic categories, which in turn interact in various ways with the formal aspect (Eisele 1990; Brustad 2000, 168). A mere semantic classification of verbs is of little significance and does not provide any crucial information about a language. It is rather the interaction between these classes and the verb morphology that tells us how a language expresses aspect.

In general terms, it can be assumed that the perfective expresses actions with temporal boundaries, i.e., completion, entry into a state, or onset of action, while the imperfective expresses meanings related to habituality, progressivity, or state. Vendler (1957) distinguishes between four classes of lexical aspect: states (like, desire, want, etc.), activity (run, walk, swim, etc.), achievement (lose, find, recognise, etc.), which expresses a punctual event with an endpoint, and accomplishment (build a house, write a novel, etc.), which indicates a process leading to an endpoint. A more detailed classification based on lexical aspect and its relationship with the verbal system in Jewish Gabes will be proposed below.

2.5.2. Tense

In contradistinction to aspect, tense situates an event on a timeline and in reference to some other time, usually the time of speaking (Comrie 1976, 66; Bybee et al. 1994). It can be expressed in various ways, both lexically and by means of verbal morphology. Cross-linguistically, the most common distinction coded morphologically is that of past and non-past. As has already been mentioned, there is some disagreement about how verbal morphology in Semitic languages relates to both aspect and tense. Within the field of Arabic linguistics, scholars generally agree that the Arabic verb expresses aspect rather than tense (Eisele 1990; Brustad 2000, 203; Horesh 2011). If this is indeed the case, a question arises as to the extent to which Arabic verbal morphology provides information about tense. On this topic, in contrast to other topics in the syntax of spoken Arabic, several

insightful studies exist (Cowell 1964, 340; Eisele 1990; Horesh 2002). The results of these studies seem to converge and confirm that the only tense feature stable across various dialects is the past encoded by the s-stem.[46] The p-stem, on the other hand, is much more complex, allows for a variety of preverbal elements, and has a tense value which is much more diverse.[47] Very little is actually yet known, however, about the tense and aspect systems specific to North African dialects.

Another important term related to the notion of tense is time reference, one of the three elements in Reichenbach's (1947) system for the temporal structure of verbs. Reichenbach distinguished between three points on the timeline encoding tense: point of speech, point of event, and point of reference. The last of the three orientates an event in relation to another point in time, which is usually another event. As has been established above, tense is usually coded by verb morphology. Time reference, in turn, refers to how tense locates a state of affairs in time and can be produced by both the sentence and the context. As one might expect, in light of the weakness of the Arabic tense system, time reference will be determined primarily by lexical strategies and discourse context (Brustad 2000, 203). Two types of time reference can be distinguished: (1) absolute time reference, which presents the temporal dimension of a verb in relation

[46] Even to this rule there are some exceptions. As demonstrated by Horesh (2011), in Palestinian Arabic, some stative verbs in the s-stem might have non-past reference.

[47] The complexity of the p-stem and its dependence on the discourse has also been observed for CA (Marmorstein 2016, 239).

to the time of speaking, and (2) relative time reference, which defines the time of an event in relation to another event (Reichenbach 1947; Comrie 1976, ii). As pointed out by Brustad (2000, 204), and as the following analysis will prove, the Arabic tense system in the main clause is closely related to the time of speaking. On the other hand, the time reference of the dependent clause is determined by the main clause.

2.6. Introduction to Analysis

In the following sections (§§2.7–2.8), I shall analyse the aspectual and temporal functions of the verbal system in Jewish Gabes. I will argue that the verb without any overt time expression is in this dialect mainly aspectual and its temporal dimension is either absent, or secondary. I will apply a modified version of the model used by Simeone-Senelle (1985) in her study on systems of aspect and tense in Tunisian Arabic, which was based on data provided by a female informant from Aʕulād Msalləm (26km north of Sfax).[48] Unfortunately, the communal identity of the informant is unknown. However, certain phonological features (such as the realisation of [q] as [g]) point to a Muslim background. To the best of my knowledge, this is the only available study on aspect and tense in Tunisian Arabic, and it therefore deserves special attention. Simeone-Senelle claims that plain verb forms (i.e., those without temporal adverbial contours) are purely aspectual and do not encode any time reference. She distinguishes two

[48] I would like to express my gratitude to Professor Marie-Claude Simeone-Senelle for sharing her article with me and providing me with some insightful comments on Tunisian Arabic.

principal forms, namely imperfective (Fr. *inaccompli*), associated with unfinished, ongoing events, and perfective (*accompli*), which expresses completed, temporally-bounded actions. This binary opposition, in turn, has evolved in order to enable the rendering of concomitance, which is understood as the co-occurrence of an event with another state of affairs—the time of speaking or another point of reference invoked in the utterance (Simeone-Senelle 1985, 58). Thus, the concomitant form of the imperfective is the actual or relative present, while the concomitance of the perfective is expressed by the perfect, which signifies a past event concomitant with the present (as opposed, in some languages, to a non-concomitant aorist that does not have any additional time dimension).

The conclusions of the study in question and the verbal forms provided by the informant differ substantially from the state of affairs in Jewish Gabes. As I shall argue, this dialect does not express the perfect in the same way as ʕAulād Msalləm, and the functional distribution of the active participle is different. Moreover, the two dialects diverge in the way they express the future tense. Not included in Simeone-Senelle's study are compound forms with auxiliary verbs (*kān* + p-stem) or forms with preverbal particles. Since their occurrence in Jewish Gabes is significant and they play an important role in the relationship between tense and aspect, I shall include them in my model. The following analysis is organised according to the morphology of the verb forms attested in Jewish Gabes. The aspectual and temporal values of each of them will be explained.

2.7. Analysis: Plain Forms

2.7.1. P-stem

The temporal value of the p-stem is undefined and strongly dependent on the context. It is compatible with the following types of lexical and viewpoint aspect. For lexical aspect, I adopt Vendler's lexical aspect classes (§2.5.1 above).

Lexical Aspect Class

(I) State

(1) *l-kbīra taʕrəf li ma ʕandhaš šəmm*
DEF-old know.PFX.3FS that NEG at.her.NEG poison
'The old one knew she did not have any poison.' (4:121)

(2) *qāllu la naʕrfək u*
say.SFX.3MS.HIM no know.PFX.1SG.you and
la žītni u la šəftək
no come.SFX.2SG.me and no see.SFX.1SG.you
'He told him: I do not know you, and you did not come to me and I have never seen you.' (6:23)

In both (1) and (2), the time reference is past.

(II) Activity

(3) *yəmšīw l-əl-bḥar kull nhār šəbbāt*
go.PFX.3PL to- DEF-sea every day Saturday
'They go to the sea every Saturday.'

The above example expresses a habitual present. However, an activity with future time reference can also be encoded by the p-stem. This includes both plain verbs, as in (4), and, according to

Simeone-Senelle's terminology, concomitant forms, accompanied by a lexical 'actualiser', i.e., an adverb indicating future reference, as in (5):

(4) *āna nʕāwnək*
I help.PFX.1PL.you
'I will help you.'

(5) *ġadwa nžīblək əl-flūš*
tomorrow bring.PFX.1SG-to.you DEF-money
'Tomorrow I will bring you money.'

Viewpoint Aspect Class

(I) Habitual

Both past and present habits can be expressed by this form:

(6) *yəqʕdu kull līla u yṣallīw*
sit.PFX.3PL every night and pray.PFX.3PL
'They would sit down every night and pray.'

The above passage comes from a dialogue about the way the Jews of Gabes celebrated the Omer; the reference is therefore past. However, as the next passage demonstrates, the p-stem can also encode the present.

(II) Progressive

(7) *qaʕdu u yāklu u yəṣrbu*
sit.SFX.3PL and eat.PFX.3PL and drink.PFX.3PL
u hbəṭ ʕaləhyəm əl-līl
and fall.SFX.3MS on.them DEF-night
'They sat down, ate, drank, and the night fell upon them.' (2:30)

As the above example demonstrates, the p-stem denotes progressive events stretched over an interval, which are characterised by their homogenous character at every point within the interval.

In sum, it can be established that the p-stem does not have any fixed temporal value and its time reference is entirely dependent on the context. In terms of lexical aspect, the only category from Vendler's model that has not been demonstrated in this stem is accomplishment.

2.7.2. S-stem

The principal role of this form is encoding complete events seen as a bounded whole. In the vast majority of cases, its time reference is past. The following temporal and aspectual features can be distinguished:

Lexical Aspect Class

(I) Activity

(8) *hūwa žra wa xda ʕaṣa*
he run.SFX.3MS and take.SFX.3MS stick
u ḍrəbha fi-ḍharha
and hit.SFX.3MS.her in-back.her
'He ran and took a stick and hit her on the back.' (2:33)

(II) Accomplishment

(9) *šəddi ṣəlṭān bəntek əẓ-ẓġīra bnāt əl-qṣaṛ*
master.my sultan daughter.your DEF-young build.SFX.3FS DEF-castle
'Your majesty, it is your youngest daughter who has built this castle.' (2:87)

(III) Achievement

(10) *fahmu təmma wāḥəd hūni*
understand.SFX.3PL there.is one here
'They realised that someone was there.' (4:36)

As demonstrated in all the above examples, the s-stem has a past time reference.

Viewpoint Aspect Class

The s-stem is compatible with lexemes implying iterative and perfect meaning:

(I) Iterative

(11) *šəlləf mənni flūš tlāta maṛrāt*
borrow.SFX.3MS from.me money three times
'He borrowed money from me three times.'

(II) Perfect

A major difference between Jewish Gabes and other Arabic dialects has to do with encoding the perfect. Whereas in many other dialects the perfect is encoded by the active participle, in Jewish Gabes it is encoded by the s-stem.[49] Thus, an immediate past that bears a relation to the present is expressed by the s-stem:

(12) *tuwwa xrəž*
now go.SFX.3MS
'He has just gone out.'

Similarly, the s-stem also expresses a resultative meaning:

[49] In Arabic dialects outside North Africa, the perfect meaning of the active participle is a widespread phenomenon (Brustad 2000, 182).

(13) *ʕalāš ənti ʕyīti?*
why you tire.SFX.2FS
'Why are you tired?'

(14) *tuwwa kəmməlt taṇḍīf tāʕ ḍāṛ*
now finish.SFX.1SG cleaning GEN DEF-house
'I have just finished cleaning the house.'

Such usages of the s-stem with perfect meaning, as in Jewish Gabes (12–14), are in fact found in ʕAulād Msalləm as well, especially with certain verbs of movement and perception (Simeone-Senelle 1985, 71). However, in addition to these, there is a significant group of verbs in that dialect which express the perfect through the *fāʕil* pattern, i.e., the historical active participle. This includes verbs of perception, such as 'to understand', 'to hear', and 'to see', but also various telic and atelic verbs, such as 'to buy', 'to run', and 'to give birth'. The following examples are taken from Simeone-Senelle (1985). Below, they will be contrasted with analogous examples from Jewish Gabes:

(15) *fāhma əd-dərs?*
understand.AC.PTCP.FS DEF-lesson
'Have you understood the lesson?'

(16) *bāni filla kebīra lāken baʕīda ʕal-blēd*
build.AC.PTCP.MS villa big but far.away on-city
'He has built a big house, but it is far away from the city.'

(17) *he-r-rāžel šāri əž-žmel*
this-the-man buy.AC.PTCP.MS DEF-camel
'This man has just bought a camel.'

(18) *əl-mrā wēlda*

DEF-woman give.birth.AC.PTCP.FS

'The woman has given birth.'

As can be seen from the above examples, the *fāʕil* pattern in ʕAulād Msalləm covers several types of perfect, such as resultative (17), and recent past (18).[50] According to Simeone-Senelle (1985, 72), the distribution of the s-stem and *fāʕil* pattern is somewhat inconsistent, and certain verbs appear in both forms with perfect meaning. However, the informant notes that *fāʕil* expresses a longer duration from the speaker's point of view in the present.

By contrast, Jewish Gabes never utilises the active participle to encode the perfect. Instead, to render the recent past, it employs the s-stem with an adverbial 'actualiser'. A resultative meaning is inferred from the context. My informant rejected the forms from ʕAulād Msalləm, and interpreted them as bearing a different meaning (the function of these forms will be discussed in detail in §2.7.3) and instead proposed the following:

(19) *fhəmt əd-dərš?*

understand.SFX.2MS DEF-lesson

'Have you understood the lesson?'

(20) *bna filla kbīra āma baʕīda mən əl-blād*

build.SFX.3MS villa big but far.away from DEF-city

'He has built a big house, but it is far away from the city.'

---

[50] For different types of perfect, see Comrie (1976, 56).

(21) *hāk əṛ-ṛāžel tuwwa sra əž-žməl*
that DEF-man now buy.SFX.3MS DEF-camel
'This man has just bought a camel.'

(22) *əl-mṛa wəldət*
DEF-woman give.birth.AC.PTCP.FS
'The woman just gave birth.'

Due to the lack of sufficient comparative data, it is currently not possible to draw any reliable conclusions regarding the cross-dialectal coding of the perfect in North African Arabic. The use of the active participle to express a past event bearing relevance to time of speech is attested in Muslim Moroccan Arabic, as well as in Muslim Tunis and Douz (Brustad 2000, 183). By contrast, in Jewish Tripoli (Yoda 2005, 308), I have found only one occurrence of the active participle that Yoda (2005, 309) translates using the English present perfect:

(23) *ṣ-ṣəḷṭan qaʕəd məzzalu ṭayəḥ*
DEF-sultan PVPT luck.his fall.AC.PTCP.MS
'The Sultan's luck has run out.'

On the other hand, there are numerous instances of the resultative state being expressed by the s-stem:

(24) *ana xalčək u žič mən bʕid*
me aunt and come.SFX.1SG from far.away
u nḥəm ṇaṛak
and want see.PFX.1SG.you
'(…) I am your aunt, I have come from afar, wanting to see you (…)' (Yoda 2005, 302)

Likewise, in the textual corpus of Jewish Tunis (Cohen 1964), I have not found any example of the active participle expressing

the perfect.[51] However, there are numerous cases of the s-stem clearly being used in a perfect context. The following passage comes from a story about an alleged appearance of a comet in the sky. One of the characters, who has not seen the comet, asks a random person about the reason for the panic in the city. The person answers:

(25) *mnīḥ mā qās tšūf? əd-dənya*
good NEG PVPT see.PFX.2MS DEF-world
māš tūfa baʕbūṣ ən-nəžma xrəž
FUT finish.PFX.3FS tail DEF-star go.out.SFX.MS
'mais tu ne vois donc pas? C'est la fin du monde, la queue de la comète est sortie' (Cohen 1964, 140)

The appearance of the comet bears clear relevance to the dialogue in the present. Nonetheless, instead of the active participle /xārəž/, the s-stem is used. It seems, therefore, that Jewish Tunis expresses the perfect in the same way as Jewish Gabes. On the other hand, similarly to what Brustad has found in Muslim Moroccan Arabic, the resultative function of the active participle is well documented in the Bedouin dialect of Douz:[52]

(26) *hīya ġāsla šaʕṛha*
she wash.AC.PTCP.FS hair.her
'She has washed her hair (and it is still wet).'

These data appear to indicate that, within the Tunisian dialect group, and perhaps within the dialects of North Africa, there is a

[51] Other usages of this form in Jewish Tunis will be mentioned in §2.7.3.

[52] The example was provided by Professor Veronika Ritt-Benmimoun in private correspondence with the author.

split between Jewish and Muslim dialects in the encoding of the perfect, with a strong preference among Jewish dialects for expressing this aspect by means of the s-stem.[53]

In what follows, I present a proposed explanation for the lack of use of the active participle with perfect meaning and the strong preference for using the s-stem to express the perfect in Jewish Gabes.

---

[53] From a typological point of view, a parallel to the split between Muslim and Jewish dialects in the encoding of the perfect can be found within Argentinian Spanish, which, of the modern varieties of South American Spanish, is considered to be highly idiosyncratic. Compared to other dialectal variants of Spanish, the use of the *pretérito perfecto compuesto* is extremely limited in the vast majority of regional varieties of Argentinian Spanish, and the simple past tense is used instead. However, in the variety known as *Norteño*, spoken in the province of Tucuman, in the north-western part of the country, speakers use the *pretérito perfecto compuesto* regularly. In contrast to the Argentinian situation, in *Castellano,* i.e., Spanish spoken in Spain, the *pretérito perfecto compuesto* is a widely used tense, with a higher rate of occurrence than the English perfect (for example, it is possible to combine it with time specification, which is ungrammatical in English). Therefore, the sentence: *Carlos ha llegado* in *Castellano* and *Norteño* would be rendered in Argentinian Spanish: *Carlos llego* 'Carlos has arrived'. There is likely no unequivocal explanation of the discrepancy in the expression of the perfect between most varieties of Argentinian Spanish and the dialect of *Norteño*, and between Argentinian Spanish and *Castellano,* but social and cultural separation is one of the possible factors.

2.7.3. Active Participle *fāʕil*

As presented above, in many Arabic dialects, the *fāʕil* pattern, historically the active participle, bears the meaning of the perfect. Scholars of Arabic highlight the resultative (Brustad 2000, 183) and stative (Eisele 1990) nature of this form.[54] In other words, it denotes a state with relevance to the time of speaking. In addition to this principal meaning, Brustad (2000, 185) also notes that the active participle of verbs of motion indicates a progressive.[55]

In Jewish Gabes, the active participle does not have the meaning of the perfect. It denotes events ongoing at speech time. Its distribution is limited to a semantically heterogenous group of verbs including verbs of motion, perception, and state. It is worth noting that the use of the active participle is often optional, and the same meaning can be rendered by the construction *qāʕəd* + p-stem. Listed below are some active participles occurring in the textual corpus and in conversations with the informants:

- *wāqəf* 'standing'
- *ʕārəf* 'understanding'

[54] The term 'stative' is rather misleading considering the class of lexical aspect also designated 'stative'.

[55] The double meaning of the active participle has been explained by Brustad (2000, 186). She argues that the distinction between resultative and progressive meaning stems from the opposition between telic and atelic aspect of the verbs of motion, i.e., *māši* can mean both 'to go' and 'to set out'. The progressive meaning, therefore, is a result of semantic expansion of the atelic perfect 'having set out' to 'being in a state of going'.

- *māši* ‘going/walking’
- *rāqəd* ‘sleeping’
- *šārəb* ‘drinking’
- *wākəl* ‘eating’
- *šāyəf* ‘looking’
- *qāʕəd* ‘sitting’
- *šāri* ‘buying’
- *rākəb* ‘riding’
- *ʕāyəš* ‘living’
- *lābəš* ‘wearing’

It is worth noting that not every verb can form an active participle. Moreover, the informant indicated regarding some of the forms on the list above that, while they are acceptable, a p-stem form preceded by *qāʕəd* would sound more natural. Specifically, the active participles *māši*, *rāqəd*, *wāqəf*, *lābəš*, and *qāʕəd* were considered the most acceptable, whereas the active participles *šārəb* and *wākəl* were deemed to sound more natural in the *qāʕəd* + p-stem construction. The informant also rejected some forms that occur in Simeone-Senelle’s study—namely, *žāri* ‘running’, *qābəl* ‘accepting’, *wālda* ‘giving birth’, and *fāhəm* ‘understanding’—indicating that they sounded unnatural.

It should be noted that the distribution of the active participle expressing the perfect also seems to be restricted in Muslim Tunis. It is not possible in Muslim Tunis to express the perfect of

the recent past by means of the *fāʕil* pattern. Instead, *ma-zəlt-ki*[56] + s-stem is used.[57]

(27) *ma-zəl-ki xrəž*

just go.out.SFX.3MS

'He has just gone out.'

(28) *ma-zəl-ki ṇaḍḍaft əḍ-ḍāṛ*

just clean.SFX.1SG DEF-house

'I have just cleaned the house.'

An alternative construction for expressing a very recent event is /tawawīn/ + s-stem:

(29) *əl-film tawwawīn bda*

DEF-film now start.SFX.3MS

'The film has just started.'

In this usage, Muslim Tunis converges with Jewish Gabes, which utilises *tuwwa* + s-stem to express the perfect of the recent past, but differs from ʕAulād Msalləm, which uses the *fāʕil* scheme in this context (see example (17) above).

Nonetheless, Muslim Tunis does utilise the active participle to express a resultative aspect, describing a state at the time of speaking that results from a past event:

(30) *šəftu hādāka? bāni ḍāṛ kbīra*

see.SFX.2MS.him that build.AC.PTCP.MS house big

'Did you see that man? He has built a big house.'

---

[56] This construction is apparently a variant of the *ma-zal-kif* construction that appears in Singer's (1984, 651) grammar of Muslim Tunis.

[57] I am deeply indebted to Mr Anis Mokni for providing the above examples and for sharing his insightful comments on Muslim Tunis.

(31) *šbīha ma žētš?*
what.in.her NEG come.SFX.3FS.NEG
'Why didn't she come?'

(32) *māhi wēlda ždīda*
but.her give.birth.AC.PTCP.FS new.FS
'She has given birth.'

As noted, the use of the active participle to express the perfect occurs across the Muslim varieties of Arabic, as shown by the following examples from three different dialects:

(33) *hād-əl-ktāb āna qāṛəh*
this-DEF-book I read.AC.PTCP.MS.him
'Je l'ai lu, ce livre!' (Moroccan; Caubet 1993, 231)

(34) *ḥaliyyan muxtārtu*
as.of.now chose.AC.PTCP.FS.him
'As of now, I have chosen him.' (Syrian; Brustad 2000, 189)

(35) *il-kahraba wāṣla?*
DEF-electricity arrive.AC.PTCP.FS
'Has the electricity arrived?' (Kuwaiti; Brustad 2000, 189)

2.7.4. The Active Participle in Muslim and Jewish Varieties: A Historical Account

As the previous section (§2.7.3) has demonstrated, Jewish and Muslim dialects utilise the active participle in different ways; in the former, it conveys present, ongoing events and is employed with a limited number of verbal lexemes, whereas in the latter, it is used with telic verbs to denote the perfect aspect when the result of an action is still felt. I have shown that this differing

usage is not limited geographically, but rather appears to be an isogloss that distinguishes Judaeo-Arabic from its Muslim counterparts in general. This phenomenon is therefore very likely rooted more deeply in the cultural and historical development of the two communities, suggesting the presence of a different substrate underlying Judaeo-Arabic. I would like to offer here a few possible explanations regarding such a possibility, within the context of a multifactorial conditioning of language change.

'Substrate' is a term denoting the result of a language contact situation, in which speakers of one language shift collectively to use of another language, usually due to geopolitical changes (Saarikivi 2006, 11). The receding language, however, leaves some traces in the adopted one, e.g., loanwords, or grammatical constructions, thus forming a stratum, or 'layer'. In the case of North African Arabic, it is generally agreed that two main substrata exist, namely Late Latin and Berber—the former spoken in the coastal cities, the latter used in the hinterland (Aguadé 2018, 34).

A fundamental question in our case is what the language of everyday communication was for the first Jewish communities in North Africa, and in particular, what it was before they began speaking Arabic.[58] There is, however, little to no documentation

[58] Although the sources on the first Jewish settlements in North Africa are very scant, it can be assumed that a North-West Semitic language was imported to North Africa as a result of the resettlement of the Jewish population from Palestine. According to Josephus Flavius' treatise *Against Apion* II, the beginning of the Jewish presence in the area west of Egypt was related to the decision of King Ptolemy Lagi (328–285) to settle Jews from Palestine in the Libyan city of Cyrene, which he had

of their languages. Before the advent of Islam and the subsequent spread of Arabic as the language of everyday communication, Aramaic was widely used by Jewish communities throughout the Middle East, such as the Jews of Palestine and Mesopotamia (Gzella 2015, 292, 381). Could it be tentatively assumed that the first communities in North Africa, as in other regions of the present-day Arab world, were also using varieties of Aramaic, a North-West Semitic language, before they adopted Arabic? The distinct use of the active participle in the Jewish varieties of Arabic vis-à-vis their Muslim counterparts appears to suggest this. Alternatively, the first Jewish settlements might have adopted Punic, another North-West Semitic language spoken in North Africa in the first centuries of the first millennium, mainly in the cities (Hirschberg 1974, 40). Both in the Aramaic that predates the spread of Islam (as exemplified by Jewish Palestinian Aramaic; Bunis 2018, 209–10) and in Punic (Krakhmalkov 2001, 199–200), the syntax of the active participle generally parallels that of modern Judaeo-Arabic. Already in pre-Islamic Jewish Palestinian Aramaic and closely related dialects, the active participle is integrated into the verbal system and, replacing the p-stem, encodes the present and immediate future (Stevenson 1924, 56; Gzella 2015, 302; Bunis 2018, 209–10). Moreover, this usage was

---

conquered around the year 300 BC. Another wave of exiles from Palestine came to North Africa after the destruction of the Second Temple (Hirschberg 1974, 24). As far as the linguistic environment of the North African Jewish communities is concerned, P. Sebag (1991, 22) suggests that, before the Roman conquest, the Jews living in the area corresponding to today's Tunisia were using Punic.

retained in certain Aramaic dialects after the spread of Islam and Arabic. This retention is documented in a group of three dialects of modern Aramaic termed Western Neo-Aramaic, which are spoken in present day Syria, in the Qalamun region, 50 kilometres north-east of Damascus. In these dialects, the historic active participle has retained the function of expressing the present and immediate future despite very extensive influence from surrounding Arabic dialects in which the active participle, as in the Muslim dialects I reviewed above, encodes the perfect (Bunis 2021).

I have noted that, in the modern Judaeo-Arabic of Gabes, the active participle is employed with a limited group of semantically heterogenous verbs. However, the common denominator of these verbs is their prevalence in day-to-day usage. It could be argued that, due to their frequent occurrence, they preserved the Aramaic syntax, while less common verbs were more susceptible to assimilation into the Arabic verbal system. With these common verbs, the active participle remained cognitively associated with its earlier morphosyntactic function as in Aramaic, and it is for this reason that the active participle never came to encode the perfect in this dialect.

An additional argument which could point to an Aramaic substrate is perhaps provided by the vowel system of both languages. In North African Arabic, similarly to Aramaic, one observes the phenomenon of pretonic reduction, i.e., the reduction of a short vowel before the stress. This is one of the features that distinguishes Aramaic from Hebrew, where the reverse process took place, namely, pretonic lengthening (Blau 2010, 123). All

Arabic dialects, in comparison to the classical language, demonstrate some degree of reduction of the vowel inventory. Nonetheless, as pointed out by Marçais (1977, 24), the more one moves from east to west, the more conspicuous the vowel reduction becomes. Indeed, in comparison to any eastern dialect, the Maghrebi Arabic vocalic material is much poorer. Below one can find a short comparison between selected eastern and western dialects:

Table 68: Vowel distribution in Eastern and Western dialects of Arabic

Eastern	**Western**	
kammalat Ṣanʕānī (Watson 1993, 138)	*kəmməlt* Jewish Gabes	‘she finished’
xashim Gulf (Holes 1990, 286)	*xšəm* Jewish Tripoli (Yoda 2005, 345)	‘nose’
katab Cairene (Eisele 1990, 174)	*ktəb* Jewish Tunis (Cohen 1975, 95)	‘he wrote’
thalātha Gulf (Holes 1990, 293)	*tlāta* Jewish Algiers (Cohen 1912, 365)	‘three’

It is worth noting that vowel elision is much more prevalent in sedentary North-African dialects than in their Bedouin counterparts, where short vowels are retained under certain circumstances (see Ritt-Benmimoun 2014, 25; Aguadé 2018, 47). Some scholars explain the tendency to drop short vowels in open syllables as a Berber substrate (Diem 1979, 55). This view, however, was called into question by Kossmann (2013, 173), who proposed two separate and independent developments in the two language

groups. If we accept this assumption, the question remains as to what triggered the reductive tendency in sedentary Arabic in the first place. The striking similarity in this respect between Aramaic and Arabic might suggest language contact between them, and that the pretonic reduction in the latter was conditioned by the Aramaic substrate. Nonetheless, language contact with Berber cannot be excluded, and the loss of short vowels in open syllables could have been brought about by multiple factors.

The above paragraphs aimed to present similarities between Jewish North African Arabic and Aramaic, especially Palestinian Aramaic, and thereby to propose the existence of an Aramaic substrate in Maghrebi Arabic, especially the Jewish varieties. This proposal is by no means definite and would require a thorough historical investigation of the beginnings of the Jewish presence in North Africa to further support the linguistic findings. Moreover, language change is often multifactorial, and thus Punic influence in the case of the distribution of the active participle, and vowel loss due to contact with Berber, are additional, no less likely, factors.

2.8. Analysis: Compound Forms

2.8.1. /qāʕd/, /qāʕ/, /ka/ + p-stem

The origin of these preverbal particles has been proposed in §2.4. Essentially, I argue that both /qāʕ/ and /ka/ derive from /qāʕd/, and that they reflect different stages within a process of cliticisation. The *qāʕd* particle is attested in both inflected (37) and uninflected (36) forms:

(36) *wən mšīt wən hrabt qāʕd yəbkīw*
where go.SFX.2MS where flee.SFX.2MS PVPT cry.PFX.3PL
'Where have you gone, where have you disappeared, they were weeping.' (3:41)

(37) *hīya qāʕda tʕayyəṭ*
she AUX scream.PFX.3FS
'She is screaming.'

Example (36) demonstrates how the MS form of the active participle has become frozen. This form, in turn, undergoes further truncation, as outlined below:

(38) *āna tuwwa qāʕ nḥaḍḍar fi mākla*
I now PVPT prepare.PFX.1SG in food
'I am now preparing food.'

(39) *ʕašīya əl-wlād ka yāklu wa*
evening DEF-boys PVPT eat.PFX.3PL and
šāfu əl-žməl ža
see.SFX.3PL DEF-camel come.SFX.3MS
'In the evening the boys were eating and saw the camel coming.' (4:109)

The principal function of this preverbal particle is to denote ongoing events stretched over an interval, and its time reference is strongly dependent on the context. Occasionally, it is also used with ingressive verbs to indicate the start of an event, or entry into a state. When the time reference is the present, and the speaker wants to highlight the continuous character of the event, it seems that the conjugated form is preferred. This assumption is confirmed by example (37) above and further examples from

Jewish Tunis, which also include prefixed forms of the root /qʕd/:[59]

(40) *ḥīna bāb əḍ-ḍāṛ yoqʕəd maḥlūl u*
now door DEF-house AUX open and
qāʕdīn yədəxlu əž-žīrān w-əl-fāmīlya kola
AUX enter.PFX.3PL DEF-guests and-DEF-family all
'Maintenant, la porte de la maison reste ouverte, et les voisins et toute la famille ne cessent d'entrer.'

(41) *ən-nāš lə-kbāṛ yoqʕədu yəddūyu*
DEF-people DEF-big.PL AUX chat.PFX.3PL
'Les grandes personnes bavardent.' (Cohen 1964, 28)

On the other hand, /qāʕ/ and /ka-/ tend to denote durative events without a predetermined time reference. In Jewish Tripoli, /qa-/ denotes both past and present events, as well as protases in conditional clauses. This is indicated by the following examples:

(42) *əl-bənt lə-kbira qalč qa*
DEF-girl DEF-elder say.SFX.3FS PVPT
čədwi l-əxča qaltla
talk.PFX.3FS to-sister.her say.SFX.3FS-to.her
'The elder sister said, while speaking to her sister, she said to her (…)' (Yoda 2005, 298)

(43) *ṃṣuġra duwčək li qa čədwi fia?*
certain.FS story.your that PVPT tell.PFX.2FS in.her
'Is your story that you are telling certain?' (Yoda 2005, 300)

[59] I have not found any truncated forms of /qāʕəd/ in Jewish Tunis.

(44) *u kif čaṛaw lə-qməžža qa čġənni*
and when see.PFX.2PL DEF-shirt PVPT sing.PFX.3FS
'And when you see the shirt singing (…)' (Yoda 2005, 306)

It can therefore be tentatively established that the inflected forms of the active participle *qāʕəd* serve to denote strictly present events, while its truncated variations mark both past and present. However, the common denominator of all of them is the expression of ongoing, durative events.

2.8.2. /kān/ + p-stem

I argue that *kān* undergoes a similar process of cliticisation to that seen in the case of *qāʕəd*. As has already been pointed out, both frozen and conjugated forms are present in Jewish Gabes. The function of both the auxiliary verb and the preverbal particle is to mark past habitual events, whose occurrence is dependent on the circumstances:

(45) *qbəl kānu nša yūldu fi-l-gīṭūn*
before AUX women birth.PFX.3PL in-DEF-tent
'Once women used to give birth in tents.'

The auxiliary verb in the above example expresses a characteristic but not completely regular event. As regards the further development of this item, it would be tempting at first glance to think that *kān* gave rise to the preverbal particle /ka-/. As pointed out in §2.4.1, this does indeed seem be the case in Moroccan, where the use of /ka-/ was expanded from conditional clauses to marking the indicative mood in general (Stewart 1998, 104; Brustad 2000, 234). The data explicitly indicates, though, that this is not a plausible explanation in the case of Jewish

Gabes. Firstly, the distribution of *kān* is noticeably different from that of /ka-/. In contrast to *kān*, there is no instance of /ka-/ marking a habitual event or any other dependent state. On the other hand, the function of *qāʕəd* and /ka-/ as markers of durative, ongoing events is identical. In addition, in §2.4, I presented the process of phonological change that explains the origin of /ka-/ in *qāʕəd*. Therefore, although the /ka-/ particles which occur in Moroccan and Jewish Gabes Arabic are homonyms, they have notably different functions and origins.

2.8.3. *ḥabb* + p-stem

This construction is one of the ways of expressing the predictive future in Jewish Gabes. This word derives from the active participle of the volitive verb *ḥābb* 'to want'. In natural, fast speech, one can also find the variant *ḥabb*. It seems, however, that the original meaning of this form has been lost, and, in a similar fashion to *qāʕəd* and *kān*, *ḥābb* is in the process of cliticisation and a semantic shift from volitive to future marker. On the other hand, in Jewish Djerba, the /ḥa-/ prefix is the main device for expressing the future, e.g., *ḥayəmši* 'he will go' (Behnstedt 1998, 67). In light of the data from Jewish Gabes, one can assume, therefore, that this prefix might have emerged from *ḥabb*.[60] Let us consider the following two examples:

[60] Behnstedt (1998, 68) argues that this particle originated in *ḥatta* 'until'.

(46) *hūwa ḥābb yʕarrəš*
he want.AC.PTCP.MS get.married.PFX.3MS
mʕa bənt əṣ-ṣəlṭān
with daughter DEF-sultan
'He is going to get married to the sultan's daughter.'

(47) *āna fi-bāli əlli hūwa mūš ḥabb yərbaḥ*
I in-mind.my that he NEG FUT win.PFX.3MS
'I think he is not going to win.'

While *ḥābb* in the former example can still be interpreted as a volitive verb producing the meaning 'he wants to get married', this is not the case in the latter. The expansion from volitive verb to predictive future marker is also a feature of other Arabic dialects. To begin with, in the Ibadite dialect of Djerba, one finds a /b-/ prefix marking the future, which, according to Behnstedt (1998, 68), stems from verb *yibġi* 'to want'. The Kuwaiti future marker /b-/ developed from the imperfective stem of the verb *yabi* 'to want' (Brustad 2000, 242; Owens 2018, 206). Outside the Semitic context, there are numerous other examples of this process, e.g., the Greek future marker θα presumably derives from θέλω meaning 'I want' (Pappas and Joseph 2001). Some Arabic dialects, on the other hand, utilise variants of the verb 'to go' to render future reference, e.g., Syrian *raḥ* and Egytpain /ḥa-/ (Brustad 2000, 242).[61] The same strategy is employed in Jewish Tunis:

[61] In the Kuwaiti and Syrian dialects, there are two future particles, i.e., /b-/ and /raḥ/, which mark the epistemic and the deontic future respectively (Brustad 2000, 241).

(48) *māš nədūyu ʕla wāḥəd uləd*
FUT talk.PFX.1PL about one boy
'Nous allons parler d'un garçon (…)' (Cohen 1964, 28)

Nonetheless, in Jewish Gabes, this construction is not the only way of expressing the future, as the plain p-stem can also do so. The question that arises, therefore, is whether they are in fact free variants, or they encode different types of future. Based on the data and conversations with the informants, I argue that they convey different estimations regarding the probability of future events. Thus, while the p-stem expresses an event whose occurrence is highly probable, *ḥābb* seems to convey the speaker's uncertainty. Let us compare the above examples, (46) and (47), with the following passages:

(49) *qālətlu: əlli taḥkəm yṣīr*
tell.SFX.3FS.him what rule.PFX.2MS happen.PFX.3MS
'She told him: whatever you decide will happen.' (7:83)

(50) *āna yžīwni fi-nhār u fi-llīl*
I come.PFX.3PL.me in-day and in-DEF-night
nətṣāwər mʕāk u l-maḥkma
consult.PFX.1SG with.you and DEF-court
tṣār bərk mən ġadwa
happen.PFX.3FS only from tomorrow
'They will come to me in the daytime and at night I will consult with you and the court will only happen the day after, after I consult with you.' (7:91)

Example (49) is an excerpt from a dialogue between the sultan and his wife. In the dialogue, after he instructed her to leave the palace, she obediently promised him that she would do whatever

he wishes. Since she is sure about the fulfilment of her promise, she uses the p-stem. Similarly, example (50) is a statement by the sultan regarding his future relationship with his wife. Hence, both the forms he uses are in the p-stem, as the occurrence of the future events is certain.

In sum, the two ways of expressing the future in Jewish Gabes represent different types of future, namely, the epistemic and the deontic. The *ḥābb* particle, which also functions as a volitive verb, indicates an intentive, low-probability mood, while events expressed by the p-stem are characteristically high-probability, factual events. This distinction thus mirrors the two particles marking the epistemic and deontic future in the Syrian and Kuwaiti dialects. It is also worth noting that the functional expansion of *ḥābb* from volitive towards modal epistemic usage is another manifestation of the subsective gradience exemplified by the active participle *qāʕəd*. Aarts (2007, 98) proposes the following scheme of the verbal gradient evolving towards modality: main verb > catenative > semi-auxiliary > modal idiom > marginal idiom > central modal. Nonetheless, as argued by Traugott and Truesdale (2010, 30), a gradual acquisition of modality by a single verb form is more widespread cross-linguistically. The reanalysis of the Jewish Gabes active participle *ḥābb* as a modality marker corroborates this assumption.

2.9. Aspect in Narrative

As has been observed by Brustad (2000, 186), narratives are a particularly important source of knowledge about both aspect and tense in any language, due to the abundance of forms and

constructions they represent. In every type of narrative, there are some events which constitute the main story line and move the narrative forward by succeeding one after another, and others which function as a skeleton or background of the main line by cooccurring with it. Hopper (1979, 213) called them respectively foreground and background. As one can expect, the two types of narrative strategies will interact in different ways with aspect.

The findings of Brustad's (2000, 188) analysis seem to confirm Hopper's (1979, 213) statement that perfective forms serve to foreground the narrative, while imperfective ones create the background to the main events. This strategy is also prominent in Jewish Gabes, as exemplified by the following excerpt:

(51) *təmma wāḥad* ***yəqʕad*** *taḥt ṣəẓra tāʕ*
there.is INDF sit.PFX.3MS under tree GEN
blaḥ ***yḥall*** *fəmmu wa* ***yəštənna*** *ḥatt*
date open.PFX.3MS mouth.his and wait.PFX.3MS until
əl-blāḥ yṭīḥlu fi-fəmmu fə-l-lāxər
DEF-fruit fall.PFX.3MS.to.him in-mounth.his in-DEF-last
hūwa ***yəqʕad*** *əkāk* ***žāw*** *l-wəžra*
he sit.PFX.3MS like.this come.SFX.3PL DEF-ministers
'There was a man who was sitting beneath a date palm, he would open his mouth and he would wait until the date fell into it; finally, when he was sitting like this, the ministers came.' (2:15–16)

The story about the lazy man is only tangentially related to the main plot, and therefore this additional package of information is introduced by the p-stem. On the other hand, the visit of the ministers belongs to the main plotline, hence the s-stem is used.

Similarly, background information can be marked by the preverbal particle /ka/:

(52) *waqt hūwa* ***ka-yʕaššˇ*** *fi-nəfṣ əl-līl žāt*
when he PVPT-guard.PFX.3MS in-night DEF-night come.SFX.3FS
waḥda mṛa žāt u ləwwḥat ḥāža
INDF woman come.SFX.3FS and throw.SFX.3FS thing
'While he was guarding at midnight, a woman came, she came and threw something' (2:32)

The p-stem has another, seemingly contradictory function, namely, it represents the so-called 'historical present'. In a sequence of perfective verbs, the occurrence of a single imperfective verb at the end constitutes a narrative strategy used by the speaker to highlight the present character of the story and give the audience the impression that the events are happening in front of their own eyes. This technique is exemplified by the following excerpts:

(53) *wāḥəd* ***mša*** *yəṭlaḅ ya-krīm tāʕ aḷḷa*
INDF go.SFX.3MS ask.PFX.3MS VOC-merciful GEN God
wṣal *lə-ḍ-ḍāṛ* ***ḍrəḅḅ*** *əḅ-ḅāḅ* ***yəṭlaḅ***
arrive.SFX.3MS to-DEF-house knock.SFX.3MS DEF-door ask.PFX.3MS
'A man went to beg for money, he arrived at a house, knocked on the door and begged.' (1:2-3)

(54) *məṛtu* ***ḥallət*** *ẓaṛḅīya u* ***təṛqa***
wife.his open.SFX.3FS carpet and find.PFX.3FS
taḥta žwābāt u ***qrātham***
under.her letters and read.SFX.3FS.them
'The wife lifted the carpet and found beneath the letters and read them.' (5:7)

In example (54), the prefix form is found in a sequence of events, between two suffix forms. Since it is rather a punctual verb, one would expect it to be in the s-stem. However, this is not the case. The function of the p-stem in this context is presumably to mark dependency on what precedes. A habitual form, coerced by the narrative context, therefore expresses a single event (Carruthers 2012).

As observed by Hopper (1979, 213), there is a correlation between foregrounding and backgrounding and the lexical aspect of a verb. In other words, the discourse aspect conditions certain types of the lexical one. Thus, foregrounding is associated with kinetic, punctual, and dynamic verbs, while backgrounding usually involves stative and durative aspects. The former is particularly apparent in sequences of verbs:

(55) *hūwa* ***žra*** *wa* ***xda*** *ʕaṣa*
he run.SFX.3MS and take.SFX.3MS stick
u ***ḍ̣rəbha*** *fi-ḍharha u* ***harbətlo***
and hit.SFX.3MS.her in-back.her and run.away.SFX.3FS.him
'He ran and took a stick and hit her on the back, but she escaped from him.' (2:33)

(56) ***žāw*** *mən xadma əl-wlād*
come.SFX.3MS from work DEF-boys
dəxlu *u* ***ṛqāw*** *šūbīrya*
enter.SFX.3PL and find.SFX.3PL bowl
'Boys came back from work, entered, and found the bowl.' (4:28)

The above sequences involve kinetic verbs like ‘run’, ‘take’, ‘hit’, and ‘enter’. On the other hand, as examples (51) and (52) demonstrate, in backgrounding, stative and atelic verbs are used, like ‘sit’, ‘wait’, ‘guard’, etc.

2.10. Conclusions

This section was concerned with the ways in which the verbal system of Jewish Gabes expresses tense and aspect. The central question was whether an isolated verb form has any temporal value or is mostly aspectual. As I have demonstrated in the course of my analysis, the verb in Jewish Gabes primarily encodes aspect and its tense reference is external, expressed by different lexical means. The aspectual features of the s-stem encompass completeness and punctuality, and therefore its temporal value is past. On the other hand, I have argued that the p-stem is timeless and strongly dependent on the context. In this respect, my findings converge with the observations made by Michal Marmorstein (2016, 239) regarding the function of the *yafʕalu* pattern in CA.

Part of this chapter was devoted to the description of preverbal particles and auxiliaries. I have attempted to establish the origin of the particle /-ka/ by contrasting its functions in Jewish Gabes with its functions in Moroccan Arabic. It is worth noting that the distribution of preverbal particles across the dialects of Arabic is uneven. Some dialects, like Egyptian and Moroccan, have developed particles that mark the indicative mood in general, while others, like Eastern Libyan Arabic or some Algerian dialects, lack any indicative prefixes (Owens 2018, 210). The Tunisian /qāʕəd-/, /qāʕ-/, and /ka-/ particles are in fact aspectual

devices indicating durativity and progressivity, which fulfil an important role within the narrative framework. They were analysed as representing different stages of cliticisation. Similarly, it has been argued that *kān* expressing past habituality and *ḥābb* used as a future marker are undergoing the same process.

My investigation was concerned also with different treatment of the *fāʕil* pattern across several Tunisian dialects. I have argued that, in contrast to the Muslim dialects, the Jewish ones do not utilise this form to express the perfect aspect. Presumably under the influence of Aramaic, this form is associated rather with present states, and perfect meaning is achieved by means of the s-stem with adverbs. However, a diachronic comparative study of more Muslim and Jewish varieties of Arabic is needed in order to corroborate the findings of this study.

3.0. Word Order

3.1. Theoretical Preliminaries

The order of the sentence constituents (verb, subject, object) has been an object of interest for typologists in the past century (e.g., Greenberg 1966; Comrie 1981). Different arrangements of these elements are associated with different discourse functions and appear in distinct types of utterance (Brustad 2000, 320). In the field of Arabic, some scholars have repeatedly expressed the view that the predominant word order in the dialects is SVO, as opposed to the VSO order of CA. This was observed, for example, in Egyptian Arabic by Gamaleldin (1967, 58). On the other hand, El Yasin (1985, 107–8) seems to be less radical and points out that both orders are equally well represented, although SVO has

become more natural and acceptable in the dialects in contradistinction to CA, where its usage was more limited. From a typological point of view, Arabic shares some syntactic features with other VSO languages, e.g., post-nominal position of adjectives, and prepositions instead of postpositions (Ingham 1994, 37; Brustad 2000, 319).

The two basic types of sentence distinguished by the classical grammarians are called *jumla ismiyya* and *jumla fiʕiliyya*, i.e., nominal and verbal sentence (Wright 2005, II:251). The former is associated with a number of discourse techniques, namely, extraposition, marking of the onset of a topic span, shift in level of description, and shift from foreground to background (Khan 1988, 37). Moreover, in terms of the type of utterance, Dahlgren (2011) observes that SV is much more frequently found in dialogues than in narratives. On the other hand, the VS order prevails in narratives. Dahlgren's analysis of an Early Arabic text clearly indicates that this order occurs much more frequently than SV. This is a natural consequence of the literary form of the text and its descriptive nature. Finally, in the absence of an independent subject, the classical language permits also OV order with fronted, focused object.

A number of pragmatic factors can affect word order. The aforementioned distinction between narratives and dialogues parallels two types of language distinguished by Brown and Yule (1983). In their discourse analysis, they pointed out that language can either express content, or convey personal attitudes and social relations. According to the terminology proposed by these two scholars, the former function is called 'transactional',

the latter 'interactional'. As pointed out by Brustad (2000, 320), narratives, which are an example of transactional language, tend to have stable topics, and the expected order is therefore VS. On the other hand, in dialogues, which represent the interactional type, speakers, by expressing their views and attitudes, dynamically change the topic of their conversation, hence the SV order prevails.

3.2. Typological Perspective

An important contribution to the investigation of word order patterns in the world's languages was a study by Li and Thompson (1976), which challenged the view that the basic structure of every language entails subject–predicate (henceforth: S–P) alignment. Based mainly on data from South-East Asia, they argued that, in some languages, the topic–comment structure is much more prominent. Subsequently, they proposed a typological classification, according to which a language can be: only subject prominent, only topic prominent, both subject and topic prominent, or neither category prominent. Although the study in question involves only a limited number of languages, and, as the authors point out, it is rather difficult to establish which type of word order prevails in a language based only on its reference grammar, the methodology used in this article can provide a valuable insight into the discourse strategies present in Jewish Gabes. In what follows, therefore, I shall examine selected passages from the text corpus by applying the classification outlined in the aforementioned study. The result of this investigation will

hopefully shed some light on the typological status of Jewish Gabes.

3.3. Subject–Predicate Alignment

3.3.1. Subgroups of Subject-Prominent Type

Subject-prominent types of sentences correspond to what Ingham calls 'uninodal' sentences (1994, 35). A uninodal sentence conveys a completely new piece of information which is delivered to the collocutor as one whole. This kind of sentence usually fronts the verb, which is the main focus of the message. Nevertheless, as will be shown below, uninodal sentences do not necessarily assume VSO form. Binodal sentences, on the other hand, consist of two elements, the first of which is a given piece of information, while the second is a new one. Thus, applying the terminology of Li and Thompson, it can be established that subject-prominent sentences are uninodal, while topic-prominent ones comprise two nodes of information.

Sentences with prevailing subject–predicate alignment can have different permutations of the three basic elements: subject, verb, and object. As demonstrated by the below tables, Jewish Gabes has two main word orders: VSO and SVO, and two peripheral ones: VOS and OSV. No examples of OVS or SOV were detected.

3.3.2. Data

VSO

1. *kānət hāk əl-xabža kbīra ʕalīya* (1:37)
   'The bread was too big for me.'
2. *ṭalʕat ktība fi-l-ḥīṭ* (1:42)
   'An inscription appeared on the wall.'
3. *žāw əž-žnūn qāllu* (2:63)
   'The ghosts came and told him.'
4. *ṭallʕat əl-fəḽḽāya wa l-fəḽḽāya fīha šəmm* (4:70)
   'She took out the comb and the comb had a poison on it.'
5. *ṭalʕat əl-xādma, kān təšbaḥ fī* (1:4)
   'A handmaid went out and kept looking at him.'
6. *fi-l-līl ḥaṭṭətlu þənṣ, raqdathu raqda þrīma, xdāt əl-frāš ntāʕu, žābət əl-xaddāma ntāʕḥa u ḥawwlathu l-ḥūš þāþāha* (7:84)
   'At night she gave him sleeping drugs, she put him to sleep, took his bed, brought his servants, and moved him to her father's premises.'

SVO

7. *l-žbālīyya yāxdu ḥbəll u kull yūm yaʕqdu ʕaqda*
   'The mountaineers would take a rope and every day they would tie a knot.'
8. *wāḥəd mša yəṭlab ya krīm tāʕ aḽḽa* (1:2)
   'A man went to beg for money.'
9. *bəntek əẓ-ẓġīra bnāt əl-qṣaṛ* (2:87)
   'It is your youngest daughter who has built this castle.'
10. *əl-ʕbəd hāda kān mḥayyər* (7:69)
    'This man was worried.'

11. *hūwa ka-yəmši fə-ṣəṭṭ əl-bḥar mḥayrān, wa hīya qaʕdət fi-l-balkūn šāfəthu yəmši* (7:70)
'While he was walking worried on the beach, she sat down on the balcony and saw him walking.'

12. *āna ḥkəmt ʕalīk u ənti ma wqəftīs fi-kəlmtək* (7:82)
'I gave you a condition and you did not keep your promise.'

VOS

13. *xalṭətna moxxna l-mṛa hādi* (7:53)
'This woman has messed with our heads!'

OSV

14. *hādi l-mṛa ənta tāxəd*? (7:48)
'Are you going to marry this woman?'

3.3.3. Grammatical Features of S–P Sentences

Li and Thompson (1976) have outlined in their study the main grammatical features of subject-prominent languages, simultaneously indicating points of divergence from the topic-prominent type. The first difference is the definiteness of the noun phrase: in contradistinction to the T–C type, where the topic is definite by default, in the S–P type, the noun can also be indefinite. This can be proven by the indefinite-specific noun *wāḥəd* in example (8), and by the indefinite noun *ktība* in (2). The noun, however, has to be in agreement with the verb, which conveys the main action of the information. As will be shown in §3.5, this is not the case in the T–C structure, where the fronted noun phrase is syntactically independent from the verb in the comment (Li and Thompson 1976, 462). As a result of this assumption, one can infer that, in the T–C type, the verb does not determine the topic.

On the other hand, in the S–P structure, the verb is obligatorily correlated with the subject. From a functional point of view, the subject orientates the hearer in the event and provides insight into the action (Li and Thompson 1976, 464). This is particularly conspicuous in verbs expressing experience, state, etc. As far as position in the sentence is concerned, the above passages indicate that the subject can be located either before or after the verb. In addition, as has been observed by Li and Thompson (1976, 465), the subject is involved in a number of grammatical processes that are not possible in the case of a topic. Thus, for example, equi-deletion or verb serialisation is possible only with a subject.[62] This is exemplified by example (6), where the same subject that occurred in the previous sentence is correlated with every verb in the sequence.

3.3.4. Discourse Features of S–P Sentences

Sentences of S–P structure are event-orientated (Brustad 2000, 329). Since they contain only one node of information, they tend to occur in dynamic narratives, where the plot is moved forward by series of verbs. There is, however, significant variation in their distribution. Using categories of foregrounding and backgrounding, it can be tentatively established that SV dominates in backgrounding, which provides commentary and support to the main storyline, while VS usually occurs in foregrounding, which builds the plot of events. Hopper (1979, 220) notices that foregrounding tends to be pragmatically unmarked. Since foregrounding moves

[62] The process of equi-deletion in Jewish Gabes was treated in §1.4.1.

the plot forward and is characterised by high dynamicity, the new information is expressed mostly by predicates and the subject is very often presupposed, hence the VS order. This strategy is exemplified by examples (3) and (4), which contain kinetic verbs like 'to come', 'to take out', etc. On the other hand, close analysis of the backgrounding strategies in different languages, which are associated with stativity and description, indicates that the new information is here introduced by the subject or the object. One should therefore expect to find the SVO/SOV order in commentary and description (Hopper 1979, 220). This strategy is often realised grammatically by means of the preverbal particle /ka-/ (example 11) and the existential verb *kān* (example 10). Moreover, in terms of discourse function, the SVO order is very often applied in order to express contrast between two entities, as in example (12). Another form of contrastive focus is exemplified by passage (9), where the SVO order serves to single out one entity, i.e., a daughter, from a group of the king's daughters.

3.4. Topic–Comment Alignment

3.4.1. Data

Topic is referred to in the comment as a complement of a preposition

15. *hāk əl-xabža yžəyyəd fīha ṛaḅḅi* (1:15)
'God will add to this bread.'

16. *əl-ḥwāyəž hādu, škūn qāʕd yfəššərlək fīhəm*? (7:26)
'All these things, who explains them to you?'

17. *(ə)tlāta baṭṭīxāt li baʕṭəthəm bəntək, fīhəm ramz* (2:10)
    'There is a hint in these three melons that your daughter has sent you.'
18. *əl-mélex ṣārlu ʕžəb hādi ḥāža əl-ʕbəd* (7:20)
    'The king was amazed by this man.'

Topic is referred to in the comment by a personal pronoun

19. *əl-ʕamla mšūma ʕaməltha* (7:11)
    'What a mistake I made.'
20. *hādīk əl-maqṣūfāt šəbʕa šnīn, nhār ḅāḅāha tʕadda u lqā əṣ-ṣəḷṭān* (7:3)
    'This seven-year-old rascal, one day her father was passing and the sultan met him.'
21. *əl-ḅṣəl hāda, tāklu wəlla yāklək?* (7:8)
    'This onion, you will eat it or it will eat you?'
22. *əl-məlḥ, yḥaṭṭu fi-ṣṛīṛa u la fi-qrīṭīṣ*
    'The salt, they put it in the pocket, and not in the box.'
23. *hād əl-xabža ʕamri ma ṛātha ʕīni* (1:21)
    'This bread, my eye has never seen one like this.'
24. *āna, yžīwni fi-n-nhār u fi-l-līl nətṣāwər mʕāk* (7:91)
    'They will come to me in the daytime and at night I will consult with you.'

3.4.2. Grammatical Features of T–C Structures

Topic–comment sentences significantly differ from S–P ones in terms of structure and function. To begin with, applying Ingham's terminology once more, this type of sentence is binodal, i.e., it consists of two pieces of information. The topic constitutes a known piece of information, while in the comment, the speaker delivers a new one. Since the identity of the topic is known to the collocutor, or is easily retrievable from their memory, the topic

by default is definite. In the above examples, one can see numerous cases of definite topics preceded by proximal (16) and distal pronouns (15) or followed by a subordinate clause (17). As regards position in the sentence, the topic is always fronted, in contradistinction to the subject, which, as indicated above, can admit different positions. In addition, T–C languages are characterised by low occurrence of passive constructions. Li and Thompson (1976, 467) point out that some languages do not have any form of passivisation (Lahu, Lisu), while others—like Mandarin, for example—make very sporadic use of the passive voice in speech. In Jewish Gabes, as has been indicated in chapter 3, §2.2, CA passive verb stems are obsolete and rarely appear in spoken language. T–C languages are also characterised by a lack of so-called 'dummy' subject constructions, which are common in languages with S–P alignment, e.g., 'it is raining' in English. Jewish Gabes, like other Arabic dialects, does not have this kind of construction (Brustad 2000, 333). On the other hand, dummy subjects often occur in impersonal expressions replacing the passive, e.g., *nəqtəl* 'he was killed' > *yəqtlū* 'they (dummy subject) killed him'. From a functional point of view, the topic sets a thematical domain in whose framework the main predication of the comment takes place. In purely T–C languages, there is no syntactic relation between the two nodes of information. This is not the case in Jewish Gabes, where, despite the lack of agreement between topic and comment predication, the topic is referred to in the comment either as a personal pronoun (19) or with a preposition (17). Nonetheless, Brustad (2000, 336) remarks that most of Li and Thompson's study is based on Mandarin, which does

not utilise anaphoric reference. In Arabic, on the other hand, anaphora occupies a significant place in the syntax. Thus, the syntactic relation between topic and comment should not be regarded as an argument against Jewish Gabes being a T–C language, as the absence of such a relation would violate basic rules of the language.

3.5. SVO Versus T–C

The question arises as to whether SVO and topic-prominent sentences are congruent and fulfil the same functions. Khan (1988), in his study of word order in CA, has argued that the discourse functions of the SV order converge with those of the T–C construction. Similarly, Brustad (2000, 336) argues that the SV order can be analysed as topic-prominent. Nonetheless, both the intonation of the sentence and the grammatical features indicate that T–C and SV are two distinct types of information packaging with different discourse functions.

To begin with, in terms of intonation groups, SV contains only one unit, while T–C has a clear prosodic pause separating the topic from the comment. Moreover, the syllable of the topic that contains the nuclear stress is lengthened, and a conspicuous rise in pitch occurs. This phenomenon is also attested in the Neo-Aramaic dialect of Telkepe (Coghill 2018, 309); the prosodic similarities between the two dialects will be discussed further in §3.6. The binodal structure can be represented in the transcription in the following way:

(1) *l-ḥwāyəž hādu | škūn qāʕd*
DEF-things these who AUX
yfəššərlək fīhəm?
interpret.PFX.3MS.to.you in.them
'All these things, who explains them to you?' (7:40)

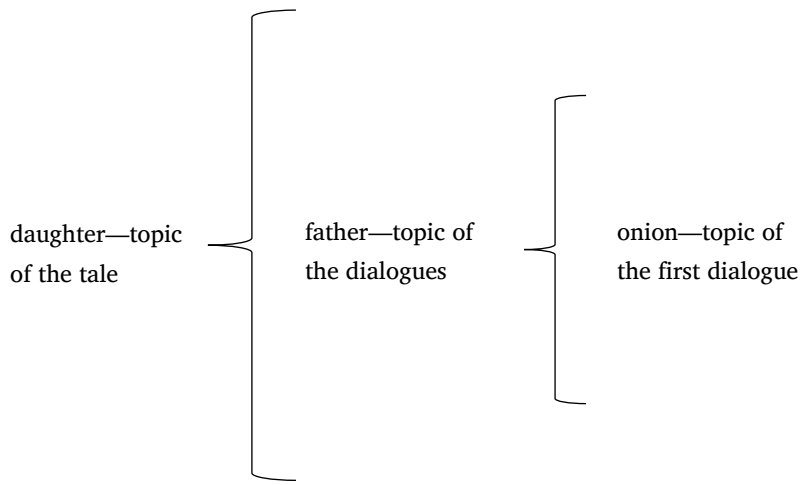
In addition, the fact that the topic is almost never in agreement with the subject of the comment proffers another argument against the functional convergence of SVO and T–C. The syntactic independence of the topic furnishes the establishment of a wide, thematical framework, in which both SVO and VSO occur. In other words, within the span of a topic, various types of focus and contrast are conveyed by the SVO order. The following excerpt from text (7) demonstrates how the T–C structure sets the thematical domain of the dialogues:

> (2) *qālət: təmma wāḥda bnīya yšəmmyūha maqṣūfāt šəbʕa šnīn* (3) ***hādīk əl-maqṣūfāt šəbʕa šnīn*** | ***nhār ḅāḅāha*** | ***tʕadda u lqā əṣ-ṣəḷṭān*** (4) *qāllu: šnūwa ḥālək wa šnūwa hāda* (5) *qāllu: naḥəmdu ṛaḅḅi, la bāš ʕalīna (6) qāllu: nḥaḅḅ nəšdək nəšda* (7) *aaa*! *aṣ-ṣəḷṭān tʕadda lqā yəẓṛaʕ fi-l-ḅṣəl* (8) *huwa qāllu:* ***əl-ḅṣəl hāda | tāklu wəlla yāklək?*** (9) *qāllu: əšmaʕ, tlāta ayyām fi-yəddək tžībli əl-xbār.*
>
> (2) There was a girl, whom people used to call a 'seven-year-old rascal' (3) This seven-year-old rascal, one day her father was passing and the sultan met him (4) He asked him how are you and so on (5) He said: thank God everything is all right (6) He said to him: I would like to ask you a question (7) Oh! when the sultan was passing by, he found him planting onion (8) He asked him: this onion,

you will eat it or it will eat you? (9) He said: listen, you have three days to bring me the answer

Section (3) of the passage above has a unique T–C structure, containing three nodes of information, with two conspicuous pauses. This structure usually appears at the beginning of a story and introduces the listener to its thematic spectrum. The first topic, i.e., 'the daughter', is the dominant topic of the entire story, thus it is set at its very beginning. The second topic, 'the father', is the main character of the following series of dialogues with the sultan. Finally, the topic of the first dialogue is introduced, i.e., 'the onion'. The distribution of topics in the first part of the story can be represented in the following way:

Figure 6: An example of a thematical span



The folktale contains a series of three lexical riddles revolving around three topics: onion, coffee kettle, and water well. Every riddle occurs in a separate dialogue between the sultan and the father and is introduced by the sultan. Subsequently, the same

topic continues in the solution of the riddle delivered by the daughter. The topic of every riddle is introduced by the T–C structure:

(2) *hūwa qāllu* ***əl-ḅṣəl hāda***
he tell.SFX.3MS.him DEF-onion this
tāklu wəlla yākləkʔ
eat.PFX.2MS.him or eat.PFX.3MS.you
'This onion, you will eat it, or it will eat you?' (7:8)

(3) *āma nḥaḅḅək tqūlli šnūwa yqūlu*
but like.PFX.1SG.you say.PFX.2MS.me what tell.PFX.3MS
əš-šəžwa kīf ḥaṭṭūha ʕal əl-ṇāṛ *šnūwa tqūlʔ*
DEF-kettle when put.SFX.3PL.her on DEF-fire what say.PFX.3FS
'But I want you to tell me now: what would it say, a coffee kettle, when they put it on the fire, what would you say?' (7:16)

(4) *qāllu tuwwa nḥabbək tqūlli*
say.SFX.3MS.him now like.PFX.1SG.you say.PFX.2MS.me
əẓ-ẓṛāṛa kīf yṭaḷḷʕu ṣṭaḷḷ mən bīr
water.well when take.out.PFX.3PL bucket from well
šnūwa tqūlʔ
what say.PFX.3FS
'He said: now I want you to tell me, a water well, when people take out a bucket from a well, what does it say?' (7:21–22)

As stated above, once the main topics are introduced, foregrounding (VSO/VOS) and backgrounding (SVO) take place. The event-orientated and description-orientated types of narrative are exemplified in the above quoted excerpt. Thus, in section (3)

of the passage above, the VOS order—*tʕadda u lqā əṣ-ṣəḷṭān*—encodes an event, moving the plot forward. On the other hand, in section (7), which is an explanatory comment with the focus on the sultan, one can see SVO*: aṣ-ṣəḷṭān tʕadda lqā.*

Nevertheless, there are some rare instances of SVO with the subject functioning as the topic of the sentence. Their occurrence is limited to the presentational verses at the beginning of a tale, in a particular structure consisting of two sentences. Namely, the first sentence introduces the existence of a certain character, while the second one, which contains the topicalised SVO order, provides an additional focus and new information. Despite the clear intonational separation of the topic from the rest of the sentence, it does function as the subject. The following passage illustrates this strategy:

(5) *wāḥad ṣəḷṭān wa ʕandu wəld*
INDF sultan and at.him child
existence
l-wləd hāda kull məṛṛa yāxəd mṛa
DEF-child this every time take.PFX.3MS woman
focus
'There is a sultan and he has a son (2) this son, each time he takes a woman (…)' (6:1–2)

In sum, as the above analysis demonstrates, SVO and T–C should generally be regarded as two distinct types of sentence with different discourse functions. In support of this view, I have presented two arguments, related to the intonation and syntax of

these sentences. Whereas the topic is conspicuously separated from the comment by a pause, the SVO order constitutes one intonation group. This, in turn, is reflected by the syntactic independence of the topic, which, unlike in an SVO sentence, is not followed by the predicate. The only exception to this rule is SVO with topicalised subject occurring after an introductory statement of existence.

3.6. Points of Convergence and Divergence with NENA

A comparative look at information packaging in the North-East Neo-Aramaic dialect of Telkepe and in Jewish Gabes can yield an interesting picture of the development of sentence structure and narrative strategies in modern Semitic.

Several points of convergence can be identified. To begin with, as observed by Coghill (2018, 309), an intonational phrase which includes only a topic has a rise in pitch at the end with simultaneous lengthening of the last syllable. In Jewish Gabes, it is the penultimate syllable that is lengthened, but, similarly to Telkepe, there is a noticeable rise in the pitch. In addition, both Jewish Gabes and Telkepe share the presence of indefinite topics. Usually, the topic is introduced by a presentational sentence stating the existence of an entity or is flagged by the indefinite-specific marker *wāḥəd* (/xa-/ in Telkepe). In Jewish Gabes, there are also rare instances of a first-mentioned topic, which are not activated in any way:

(6) *HEzūgHE yḥabbu baʕdhəm yāsər ʕarršu*
couple like.PFX.3PL each.other a.lot get.married.SFX.3PL
u ma ṭaḷʕūš mən əḍ-ḍāṛ mən
and NEG leave.SFX.3PL.NEG from DEF-house from
əl-ʕarš ṣahrīn
DEF-wedding two.months
'A couple loved each other a lot, they got married and for two months since the wedding have not leave their home.' (5:1–2)

This is the opening sentence of the tale, yet the couple is not definite or introduced by an existential sentence. According to Gundel (1988, 215), indefinite topics are usually anchored in another, definite entity (Coghill 2018, 308). However, as example (6) demonstrates, the topic can appear for the first time as indefinite and unanchored.

Another point of convergence of Jewish Gabes with Telkepe is topicalisation of adverbs or adverbial clauses. In numerous Arabic dialects, it is a common tendency to topicalise temporal verbs, like *ṣār* 'to become' or *kān* 'to be', which do not bear any direct syntactic relationship with the main clause (Brustad 2000, 337). Jewish Gabes does not appear to utilise this strategy. However, there are numerous cases of topicalised adverbial clauses, which have the same intonational structure as the T–C sentences:

(7) *līla fi-l-līl xūdi li ʕažīž ʕalīk*
night in-DEF-night take.IMP.FS REL dear on.you
wa trūḥi l-ḅāḅāk
and go.PFX.FS to-father.yours
'Late in the night take whatever is valuable to you and go back to your father.' (7:81)

(8) *nhār əl-mélex tʕadda māši ʕal*
day DEF-king pass.SFX.3MS go.AP.MS on
əl-bḥar yərqa
DEF-sea find.PFX.3SM
'One day the king was passing by, found (…)' (7:65)

Coghill (2018, 310) reports the same tendency in Telkepe, where topicalised adverbs set the temporal frame of the event.

Despite certain similarities between the two languages, from a wider perspective, the development of word order in Arabic and NENA has followed different paths. Maghrebi Arabic has not been affected by neighbouring, non-Semitic languages to the same extent as NENA. The language contact-induced changes are particularly conspicuous in the region of Western Asia, where sentence typology of both NENA and, to a lesser extent, Arabic has undergone modifications under the influence of Turkic and Iranian languages. In the Jewish dialect of Sanandaj and other NENA dialects of northern Iraq and north-western Iran, the original Semitic VO order switched to OV due to contact with Turkic (Khan 2018, 21). Moreover, in those NENA dialects which adopted OV, syntactic elements expressing goals of verbs of movement are placed after the verb, whereas it is usually the case in OV languages that all the arguments precede the verb (Khan

2018, 23). This development was presumably induced by neighbouring Turkic and Iranian languages. Finally, all the languages in the region, including NENA and Arabic, have an obligatory, clause-final copula, which has diffused from Iranian (Khan 2018, 20).

The situation in North Africa differs considerably from that of Western Asia, mostly because of the relative linguistic uniformity of the region. The only language that has been in contact with Arabic long enough to induce some changes is Berber, where the basic word order is VSO. It has also been argued recently that some varieties of Berber are in the process of shifting to a topic-prominent system (El-Hankari 2015). As this chapter has indicated, however, both VSO and T–C constructions are equally basic in Arabic, hence no contact-induced change could occur with regard to word order.