

in DRET in 2002, is analyzed and decoded. The goal of the Discourse Structure test, which is specified by CEEC (2002), is to test the understanding and demand of text structure. As shown in Appendix G, the average length of passages in Discourse Structure ranges from 15 to 23 sentences, and the progression mode is mostly a combination of Type 1 R>T and Type 2 T>T while Type 6 R>R also appears frequently. Type 4 Split R can be found only in the passage in Year 2005 and Year 2006.

For this test, the test-taker is required to choose from items (A)-(E) to fill in each blank to make the textual organization clear, smooth and logical. For the convenience of analysis, sentences are numbered in order of occurrence, and Theme constituents are italicized.

(5.1) ¹*Windshield wipers of a car* were invented by Mary Anderson on a trip in New York in 1903. ²*While touring the city on a streetcar*, Mary was not interested in the views on the street. ³ ___1___. ⁴*Repeatedly*, the motorman had to get out of the streetcar to wipe off the snow and ice collected on the windshield. ⁵*New York streetcar motorman at that time* had tried various ways to solve this problem. ⁶ ___2___. ⁷*Mary, sitting on her seat*, quickly drew her device in her sketchbook. ⁸ ___3___. ⁹*Mary's device* allowed the motorman to use a lever inside the streetcar to activate a swinging arm on the windshield to wipe off the snow and ice. ¹⁰*Because the device was first designed for cold weather*, it could be easily removed when warmer weather arrived. ¹¹ ___4___. ¹²*Even though her friends teased her about her awkward invention attached to a streetcar*, May didn't give in to peer pressure. ¹³ ___5___. ¹⁴*By 1913*, her invention became standard equipment on American cars. ¹⁵*Windshield wipers* save lives and make it easier to drive through storms.

- (A) *Her solution* was simple.
- (B) *A year later*, she received a patent for it.
- (C) *Its function of wiping rain* was later considered and added.
- (D) *Instead, she* paid much attention to the streetcar motorman.
- (E) *Wiping off the snow and ice by hands*, however, seemed to be the only solution.

The progression mode is listed as follows:

Sentence No.	Theme	Rheme	Theme Category	TP Type	Cohesive Device
1	Windshield wipers of a car	were invented by Mary Anderson on a trip in <u>New York</u> in 1903.	Subject		
2	While touring <u>the city</u> on a streetcar,	<u>Mary</u> was not interested in the views on the street.	Dependent Clause	1/ R>T	Demonstrative Reference
3	___1___				
4	Repeatedly,	<u>the motorman</u> had to get out of the streetcar to wipe off the snow and ice collected on the windshield.	Adjunct		
5	New York streetcar <u>motorman</u> at that time	had tried <u>various ways</u> to solve this problem.	Subject	1/ R>T	Same word
6	___2___				
7	Mary, sitting on her seat,	quickly drew <u>her device</u> in her sketchbook.	Interpolation in Theme		
8	___3___				
9	<u>Mary's device</u>	allowed the motorman to use a lever inside the streetcar to activate a swinging arm on the windshield to wipe off the snow and ice.	Subject		
10	Because <u>the device</u> was <u>first</u> designed for cold	it could be easily removed when warmer weather	Dependent Clause	2/ T>T	Same word

	<u>weather</u> ,	arrived.			
11	___4___				
12	Even though her friends teased her about her awkward invention attached to a streetcar,	<u>May</u> didn't give in to peer pressure.	Dependent Clause		
13	___5___				
14	By 1913	<u>her invention</u> became standard equipment on American cars.	Adjunct		Same Nominal Reference
15	<u>Windshield wipers</u>	save lives and make it easier to drive through storms	Subject	1/ R>T	Synonym

The choice of which one of the five items to fill in each blank can be determined by the identification of the themes as well as the text structure. For blank 1, because R2 is *Mary was not interested in the views on the street*, one would look for a contrastive theme. Since the theme *Instead* and *she* in (D) serve as an adversative conjunction and a personal reference to *Mary* respectively, (D) provides a contrastive theme and forms a Type 1 R>T progression from R2. Besides, *the motorman* in R4 repeats the theme in the previous sentence; (D) is evidently the correct answer for blank 1. As for blank 2 and blank 3, the theme in (E) and (A) refer back to R5 and R7 respectively, forming two more Type 1 R>T progression. For blank 4, since the preceding T10 and R10 both mention *weather*, what can be filled in blank 4 should be also related to *weather*. Therefore, the theme *its function of wiping rain* in (C) can serve as a nonpersonal reference to *the device* as well as a hyponymy of *weather* in T10, forming a Type 2 T>T progression. Moreover, the word *later* in (C) serves as an antonym of the word *first* in T10. It stands to reason that (C) is the perfect choice for blank 4. Finally, (B) is

the only choice for blank 5, because the personal reference *she* in R(B) refers back to *Mary* in R12, hence forming Type 6 R>R progression; besides, by the same type, the pronominal reference *it* in the same R(B) progresses to R14, recovering the nominal reference *her invention*. Hereby, the missing information in each blank can be retrieved one by one.

Even for longer passages with a larger chunks, this approach helps to clarify the distribution of themes. Take the passage in DS in 2005 for another example.

(5.2) ^{1.1}*Many researchers* have been interested in whether or not an individual's birth order has an effect on intelligence. ^{1.2}*One of the first studies* was carried out in the Netherlands during the early 1970s. ^{1.3} _____ 1 _____ ^{1.4}*The test* was called the "Raven," which is similar to the I.Q. test. ^{1.5}*The researchers* found a strong relationship between the birth order of the test takers and their scores on the Raven test. ^{1.6} _____ 2 _____

^{2.1}*In 1975*, Zajonc and Markus developed the confluence theory to explain the negative effect of birth order on intelligence involving the data from the Dutch. ^{2.2} _____ 3 _____ ^{2.3}*However*, Rutherford and Sewell in 1991 tested the theory and found no support for it. ^{2.4}*They* concluded that birth order effects did not exist.

^{3.1} _____ 4 _____ ^{3.2}*On one side* there are Zajonc and Markus, who state that birth order effects may be explained solely by family size and the spacing of births. ^{3.3}*With short birth intervals*, increasing order of birth will be associated with lower intelligence levels. ^{3.4}*But with long birth intervals*, this pattern may be reversed. ^{3.5} _____ 5 _____ ^{3.6}*They* show that the confluence model does not explain any relationship between birth order and intelligence that may exist in the American data. ^{3.7}*Up to date*, there is no agreement between these opposing views. ^{3.8}*And such a debate* may continue for years to come.

(A) *There are* definitely two sides to this issue.

(B) *Scores* decreased as the family size increased and also with birth order.

(C) *An intelligence test* was administered to over 350,000 Dutch males when they turned 19 years of age.

(D) *On the other side* are Rutherford and Sewell, who studied more than 10,000 American high school graduates.

(E) *Since then*, the theory has been elaborated and even extended to explain the positive effect of birth order on intelligence.

The progression mode is listed as follows:

Sentence No.	Theme	Rheme	TP Type	Cohesive Device
1.1	Many <u>researchers</u>	have been interested in whether or not an individual's birth order has an effect on intelligence		
1.2	One of the first <u>studies</u>	was carried out in the <u>Netherlands</u> during the early 1970s	2/T>T	Collocation
1.3	_____ 1 _____			
1.4	<u>The test</u>	was called the " <u>Raven</u> ," which is similar to the I.Q. test	2/ T>T	Demonstrative Reference
1.5	The researchers	found a strong relationship between the birth order of the test takers and their <u>scores</u> on the <u>Raven</u> test	6/ R>R	Same Word
1.6	_____ 2 _____			
2.1	<u>In 1975</u>	Zajonc and Markus developed the confluence theory to explain the negative effect of <u>birth order</u> on intelligence involving the data from the Dutch	6/ R>R	Same Word

2.2	<u>3</u>			
2.3	However, <u>Rutherford and Sewell</u> in 1991	tested <u>the theory</u> and found no support for it	6/ R>R	Same Word
2.4	<u>They</u>	concluded that birth order effects did not exist	2/ T>T	Personal Reference
3.1	<u>4</u>			
3.2	<u>On one side</u>	there are Zajonc and Markus, who state that birth order effects may be explained solely by family size and the <u>spacing of births</u>	4-1/ Split R	Comparative Reference
3.3	With <u>short birth intervals</u>	increasing order of birth will be associated with lower intelligence levels	1/ R>T	Synonym
3.4	But with <u>long birth intervals</u>	this pattern may be reversed	1/T>T	Antonym
3.5	<u>5</u>			
3.6	<u>They</u>	show that the confluence model does not explain any relationship between birth order and intelligence that may exist in the American data	1/ R>T	Personal Reference
3.7	Up to date	there is no agreement between <u>these opposing views</u>	Ss>R	Demonstrative Reference

3.8	And such a <u>debate</u>	may continue for years to come	1/ R>T	Collocation
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The choice of which one of the five items to fill in each blank can be also determined by the identification of the themes as well as the text structure. For blank 1, (C) can be filled in. Considering from T1.2 *One of the first studies*, the theme *An intelligence test* in (C) serves as a synonymy and hyponymy of *studies*, thus to continue the Type 2 T>T progression from T1.2; besides, the word *Dutch* in R(C) serves a synonym of *the Netherlands* in R1.2; while from T1.4, *The test* serves as a demonstrative reference to and a lexical repetition of the theme *An intelligence test* in (C), thus to persist the T>T progression as well. Without doubt, (C) functions as a close and tight linkage between T1.2 and T1.4. As for blank 2, the theme *Scores* in (B) repeats the same word *scores* in R1.5, forming a Type 1 R>T progression. As for blank 3, since it's arranged between T2.1 *In 1975* and T2.3 *However, Rutherford and Sewell in 1991*, (E) is the perfect choice, for the adverbial reference *then* has some connection with the preceding T2.1 and the following T2.3, forming two Type 2 T>T progression. As for blank 4 and blank 5, the remaining two choices are closely related. (A) fits in blank 4 better, because the rheme *two sides* is supposed to serve as a comparative reference to the subsequent two themes, as one reference to T3.2 *On one side* and the other to the theme *On the other side* in (D), which thus is the perfect choice for blank 5. To be more assertive, take a look at the rheme *Rutherford and Sewell* in (D), and then take another look at T3.6 *They*. Since the latter serves as a personal reference to the former, the fact that (D) fits in blank 5 is reassured. Hence, from the rheme *two sides* in (A), an exposition of split rheme develops into T3.2 *On one side* and T3.5. *On the other side*.

5.2 Solution to Problems in Decoding Integrative Test

This approach also helps in taking Integrative Test both in SAET and in DRET.

According to CEEC (2002), the goal of Integrative Test is to test if the test-taker is able to choose both semantically and syntactically correct vocabulary or idiomatic phrases by judging from the sentence or the context. As shown in Appendix H and Appendix I, the sentence number of each passage in Integrative Test ranges from 5 to 12, with 3 passages in SAET and 4 passages in DRET. Regarding the progression mode, in SAET the thematic progression of Type 1 R>T and Type 2 T>T is the most frequent pattern. However, in DRET the rhematic progression of Type 5 T>R and Type 6 R>R outnumbers that of Type 1 R>T and Type 2 T>T.

For this test, the test-taker is required to choose from alternatives (A)-(D) to fill in each blank to make the textual organization clear, smooth and logical. The following passage is taken from 2005 SAET. For the convenience of analysis, sentences are numbered in order of their occurrence. For example, (1.1) stands for the first sentence in the first paragraph, (2.1) the first sentence in the second paragraph, and so on. Besides, Theme parts in each sentence are italicized.

(5.3) ^{1.1}*European politicians* are trying to get the UK Government to make cigarette companies print photos on the packets. ^{1.2}*These photos* will show __1__ smoking damages your health. ^{1.3}*The shocking pictures* include images of smoke-damaged lungs and teeth, with reminders in large print that smokers die younger.

^{2.1}*The picture* __2__ have been used in Canada for the last four years. ^{2.2}*It* has been very successful and has led to a 44% __3__ in smokers wanting to kick the habit. ^{2.3}*At the moment* EU tobacco manufacturers only have to put written health warnings on cigarette packets __4__ the dangers of smoking.

^{3.1}*The aim of the campaign* is to remind people of the damage the deadly weed does to their body. ^{3.2}*It is believed* that this would be to the best interest of all people, __5__ teens who might be tempted to start smoking. ^{3.3}*These dreadful photos* may change the impression among teenagers that smoking is cool and sexy.

1.(A) when (B) how (C) where (D) what

2.(A) symbols (B) warnings (C) commercials (D) decorations

- 3.(A) increase (B) change (C) portion (D) drop
 4.(A) highlight (B) highlights (C) highlighting (D) highlighted
 5.(A) in fact (B) rather than (C) regarding (D) especially

The progression mode is listed as follows:

Sentence No.	Theme (=Topic)	Rheme (=Comment)	Theme Category	TP Type	Cohesive Device
1.1	European politicians	are trying to get the UK Government to make cigarette companies print <u>photos</u> on the packets.	Subject		
1.2	<u>These photos</u>	will show __1__ smoking damages your health.	Subject	1/R>T	Same word
1.3	<u>The shocking pictures</u>	include images of smoke-damaged lungs and teeth, with reminders in large print that smokers die younger.	Subject	2/T>T	Synonym
2.1	The picture __2__	have been used in Canada for the last four years.	Subject		
2.2	<u>It</u>	has been very successful and has led to a 44% __3__ in smokers wanting to kick the habit.	Subject	S>T	Extended Demonstrative Reference
2.3	At the moment	EU tobacco manufacturers only have to put written health warnings on cigarette packets __4__ the dangers of smoking.	Adjunct		
3.1	The aim of <u>the campaign</u>	is <u>to remind people of the damage the</u>	Subject	1/R>T	Synonym

		<u>deadly weed does to their body.</u>			
3.2	That <u>this</u> would be to the best interest of all people, <u>5</u> <u>teens</u> who might be tempted to start smoking	is believed.	Clause Subject as Theme	1/R>T	Demonstrative Reference
3.3	These dreadful photos	may change the impression among <u>teenagers</u> that smoking is cool and sexy.	Subject	5/T>R	

For blank 1, since T1.2 and T1.3 talk about the same theme *the photos*, R1.2 and R1.3 may share something in common. Because R1.3 states to what extent smoking damages health, that is, *how* smoking damages your health, (B) *how* is the right choice for blank 1. As for blank 2, since T1.3 *The shocking pictures* and T2.1 *The picture 2* may talk about *the pictures* or ‘*something*’ about *the pictures*, what fits in blank 2 must have something to do with *shocking* in T1.3 as well as with *damage* in R1.3. Therefore, (B) *warnings* can serve as a lexical cohesion, i.e. near-synonymy of shocking and damage, that is, (B) *warnings* can be filled in blank 2. As for blank 3, because *picture warnings* in T2.1 are used in an attempt to increase the risk-taking of smokers, thus in hope of decreasing the number of smokers, from the other way around, the percentage of *smokers wanting to kick habit* in R2.2 is supposed to RISE. Therefore, (A) *increase* is the correct answer for blank 3. Although the differentiation between (A) *increase* and (D) *drop* is very tricky, as long as R2.2 is read thoroughly and a careful discrimination between (A) and (D) is made, false judgment can be avoided. As for blank 4, the choice is local; the question can be solved within the clause and doesn’t have to do with the other sentences. What has to be done is to

choose one from the four different verb forms of highlight, and (C) highlighting is the right choice, since the present participle phrase is to modify the previous warnings. Finally R3.2 states that the significance of anti-smoking campaign is for the good of all people, immediately following it *teens* are mentioned in the same rheme, and again the lexical repetition *teenagers* is repeated in R3.3. Since the hyponymy *teenagers* out of the superordinate *people* is picked out to be emphasized, it can be inferred that among the four choices, (D) *especially* is the correct answer for blank 5 to put emphasis on *teenagers*, the particular group out of *people*.

5.3 Solution to Problems in Decoding Semantic Choice

The passage in Semantic Choice can be decoded in the same way. As its name suggests, the goal of the Semantic Choice test is to test if the test-taker is able to choose semantically correct vocabulary or idiomatic phrases by judging from the sentence or the context. As shown in Appendix J, the length of passages in Semantic Choice varies from 9 to 15 sentences and the progression mode is mostly Type 1 R>T and Type 2 T>T while Type 5 T>R and Type 6 R>R follow behind. Besides, Type 3 Split T and Type 4 Split R appear in 3 passages.

For this test, the test-taker is required to choose from ten items (A)-(J) to fill in each blank to make the textual meaning clear and logical. The following passage is taken from 2005 SAET.

(5.4) ^{1.1}Falling in love is always magical. ^{1.2}It feels eternal as if love will last 1. ^{1.3}We naively believe that somehow we are 2 from the problems our parents had. ^{1.4}We are assured that we are destined to live happily ever after.

^{2.1}But as the magic fades and daily life 3, it happens that men, forgetting that men and women are supposed to be different, continue to expect women to think and react the way men do; ^{2.2}women, 4, expect men to feel and behave the way women do. ^{2.3}5 taking time to understand and respect each other, we become demanding, resentful, judgmental, and intolerant.

^{3.1}6, our relationships are filled with unnecessary disagreements and conflicts. ^{3.2}Somehow, problems creep in, resentments build, and communication 7. ^{3.3}Mistrust increases and rejection and repression surface. ^{3.4}The magic of

love is then lost.

^{4.1}Very 8 people are able to grow in love. ^{4.2}Yet, it does happen. ^{4.3}9 men and women are able to respect and accept their differences, love has a chance to blossom. ^{4.4}Love is, 10, magical, and it certainly can last if we remember our differences and respect each other.

(A) breaks down (B) Consequently (C) similarly (D) indeed (E) few
(F) forever (G) Instead of (H) takes over (I) free (J) As long as

The progression mode is listed as follows:

Sentence No.	Theme	Rheme	Theme Category	TP Type	Cohesive Device
1.1	<u>Falling in love</u>	is always magical	Subject		
1.2	<u>It</u>	feels eternal as if love will last <u>1</u>	Subject	2/T>T	Reference
1.3	<u>We</u>	naively believe that somehow we are <u>2</u> from the problems our parents had	Subject		Personal Reference
1.4	<u>We</u>	are assured that we are destined to live happily ever after	Subject	2/T>T	Same Personal Reference
2.1	But as the magic fades and daily life <u>3</u>	it happens that men, forgetting that men and <u>women</u> are supposed to be different, continue to expect <u>women</u> to think and react the way men do	Conjunction as part of Theme		Conjunction
2.2	<u>women</u>	<u>4</u> expect <u>men</u> to feel and behave the way <u>women</u> do	Subject	1/R>T	Same word

2.3	__5__ taking time to understand and respect <u>each other</u>	<u>we</u> become demanding, resentful, judgmental, and intolerant	Dependent Clause	1/R>T	Reference
3.1	__6__, <u>our</u> relationships	are filled with unnecessary <u>disagreements and conflicts</u>	Conjunctive Adjunct	1/R>T	Personal Reference
3.2	Somehow	<u>problems</u> creep in, resentments build, and communication __7__	Adjunct	6/R>R	Near-Synonym
3.3	<u>Mistrust</u>	increases and rejection and repression surface	Subject	1/R>T	Near-Synonym
3.4	The magic of love	is then lost	Subject		
4.1	Very __8__ people	are able <u>to grow in love</u>	Subject	5/T>R	Same word
4.2	Yet, <u>it</u>	does happen	Conjunction as part of Theme	1/R>T	Substitution
4.3	__9__ men and women are able to respect and accept their differences	<u>love</u> has a chance to blossom	Dependent Clause	S>R	
4.4	<u>Love</u>	is, __10__, magical and it certainly can last if we remember our differences and respect each other	Subject	1/R>T	Same word

For blank 1, since the word *eternal* in R1.2 is close in meaning with the alternative

item (F) *forever*, the correct answer (F) *forever* can be easily identified. As for blank 2, since the adjective *free* frequently co-occurs with the preposition *from*, and the phrase *free from the problems* seems fit the contextual meaning; thus, (I) *free* is the right choice for blank 2. For blank 3, two processes are mentioned in T 2.1 and the two processes are contrast in meaning; thus, (H) *takes over* can serve as the antonym of *fades* in T2.1. As for blank 4, since the way men expect women is mentioned in R 2.1, the similarity between comparison for women's expectations of men is mentioned in R 2.2; therefore, (C) *similarly* can be filled in blank 4. For blank 5, T2.3 contrasts R 2.3 in meaning; thus, (G) *Instead of* can serve the adversative conjunction, connecting T2.3 and R 2.3; (G) *Instead of* is the correct answer for blank 5. As for blank 6, R 2.3 may result in S 3.1, forming some kind of cause-effect relation between sentences. Thus, (B) *Consequently* appropriately serves as the causal conjunction, connecting the previous sentence meaning while initiating the following sentence; (B) *Consequently* can be filled in blank 6. For blank 7, as is mentioned in R 3.2, some problems take place after both sexes are occupied by negative emotions, and it follows that there is no way for both sexes to express themselves and make themselves understood; thus, communication *breaks down*; besides, in terms of collocation, (A) *breaks down* is exactly the right verb to go after the subject *communication*. Therefore, (A) *breaks down* fits in blank 7. For blank 8, (E) *few* can be filled in. Since no more adjectives can be picked out to modify the subject *people*; besides, compared with the following S 4.2, which initiates with the adversative conjunction *Yet*, S 4.1 is negation in meaning, (E) *few* is the perfect choice for blank 8. As for blank 9, the two clauses T4.3 and R 4.3 needs a connection, and (J) *As long as* fit in this blank, serving as a conditional connection. Finally, (D) *indeed* is the only correct choice for blank 10. Since the last sentence is a conclusion, reinforcing the first sentence and echoing the beginning meaning, but with condition, (D) *indeed*

can be used to emphasize and agree with what has been mentioned earlier and thus can be filled in this blank.

It seems that thematic progression doesn't help in this part and that in some cases (such as blank 1, 2, 3, 7, 8) using cohesive device alone within sentences, especially lexical cohesion, is just sufficient in figuring out the meaning. As for conjunction, since its nature is in the connecting relation between sentences, it is of more help in solving problem sentences beginning with a blank (such as blanks 5, 6, 9). Nevertheless, the distinction between theme and rheme makes the passage more accessible to the test-taker; that is, through chunks of words rather than through a whole text, cohesive ties are more likely to be spotted. The decoding of such passages seemingly requires more local understanding; as long as the test-taker understands the meaning of each alternative item, they won't miss the correct answer for each blank. However, the only challenge is that the test-taker has to choose one correct answer out of ten alternatives, which is 1/10 rather than 1/4 chance to be successful, and once one blank is filled in wrong, it follows that two mistakes are made. Therefore, it is generally observed that students have more difficulty in doing Semantic Choice than Integrative Test.

In conclusion, the frequency of progression types in test passages roughly corresponds to that of progression types in the texts analyzed. That is, thematic progression patterns of Type 1 R>T and Type 2 T>T are the commonest types, and thematic progression patterns of Type 5 T>R and Type 6 R>R are the second commonest types, with few types of Split T or Split R found in few test passages. However, the only exception is found in passages under subtitle Integrative Test in DRET, where the outcome is reversed: the frequency of thematic progression of Type 5 T>R and Type 6 R>R outnumbers that of thematic progression of Type 1 R>T and Type 2 T>T (see Appendixes G, H, I, and J).