

IV. Design of the Study

A. Sources of Data

This is a cross-sectional study as the participants are not identified individuals and our domain of study is not limited to certain individuals rather we have been dealing with a large number of participants having some shared qualities and objectives in their studies and these qualities will help to make the result of the study reliable.

1. The Subjects

Three groups of 103 Iranian ELT students of B.A. II year, two groups consisting of 35 subjects each and the third group consisting of 33, participated in this experiment in Kerman Islamic Azad University, Iran. These learners had already received an average of five years of instruction in English upto high school level. At the University, they had also received instruction for two terms. It was confined only to sentence level grammar and composition. At the second year level, they were introduced to paragraph level composition practice. This normally lasts for four months, but the experiment was held after two months of instruction because the allotted time and instruction were considered enough for the learners to produce a simple paragraph and reveal their linguistic input. During this period of

two months these learners were taught by the researcher. The learners were provided with sample paragraphs. Writing strategies and techniques such as major and minor ideas, improving a topic sentence, support techniques and conclusion writing were discussed. The learners were subsequently, required to begin writing on at least three topics. Their compositions were carefully scrutinized by the researcher and some of the important syntactic errors were discussed. Their course book, Bailey and Powell's "The Practical Writer With Readings" provided the required insight on these topics. This is after these steps that the experiment proceeded.

Tables 3 & 4 demonstrate the age and the sex of 103 subjects who participated in the experiment.

Age range	Frequency	Percent
19-20	36	35
21-22	39	37.9
23-40	28	27.2
	103	100%

Table 3 demonstrating the age of the subjects

Gender	Frequency	Percent
Female	85	82.5
Male	18	17.7
Sum	103	100%

Table 4 demonstrating the sex of the subjects

2. Placement Test

In order to determine the linguistic proficiency of the subjects involved in the experiment, an Oxford placement test, containing 100 items was administered. The test could finally classify the subjects according to the table below. The mean square of the test becomes 55.14 with a standard deviation of 8.7 and variance of 75.63. The relevant reliability of the test is calculated to be 0.679 according to Kurdar and Richardson KR-21 method.

However, the subjects, based on their scores, are finally classified under the levels stated in table 3. As it can be concluded from the table, the subjects' level ranges from post-intermediate to basic level with the pick around pre- and post-intermediate and elementary level. In other words, the subjects who participated in the experiment based on Oxford Placement test centered around elementary.

Level	Score Range	Frequency	Percent
Post-intermediate	75-80	8	7.8
Upper-intermediate	72-74	4	3.9
Mid-intermediate	70-71	3	2.9
Lower-intermediate	68-69	5	4.9
Pre-intermediate	65-67	10	9.7
Post-elementary	60-64	21	20.4
Elementary	55-59	26	25.2
Foundation	50-54	20	19.4
Basic	45-49	6	5.9
Sum		103	100%

Table 5 containing the information belonging to the subjects who participated in the experiment.

B. Methods of Data Gathering

The study is based on two sources of data : 1) grammaticality judgment test, and 2) collecting learners' errors by analyzing their writings.

1. Grammaticality Judgment Test (GJT)

Ellis¹⁶³ defines GJT as one way of obtaining data on what learners know about the L2 and this can be done by asking them to judge whether sentences are grammatically correct or not. He adds that this method is favoured by some researchers because they believe it provides information about learners' institutions and thus caters for an internalized approach. Corder¹⁶⁴ believes that grammaticality judgement test by the learner can only be based upon the grammar of his interlanguage. Schachter¹⁶⁵ claims that when attempting to describe the

¹⁶³ Op Cit, P: 705.

¹⁶⁴ S. Pit Corder. 1972. *Introducing Applied Linguistics*. Penguin Education. P: 65.

¹⁶⁵ Jacquelyn Schachter et al. 1976. "Learner Intuitions of Grammaticality" in *Language Learning* 26:1. PP: 67-76.

linguistic knowledge of native speakers of a language, linguists make use of two kinds of data: performance data, based on the actual linguistic production by the speaker and intuitional data based on speaker reaction to already produced sentences, such as judgments of grammaticality and ungrammaticality, paraphrase, synonym, ambiguity, etc. and now this standard tool is also applied as a scale for the measurement of non-natives' judgment power. Having some of the objectives mentioned above, the researcher has applied a *GJT* to obtain some information. The aim is not analyzing the errors of the participants or contrasting the structures of L1 and L2. Rather the main objective is coming to the fact that what proportion of the deviant forms that build up a part of learners' interlanguage is made up of mono and bi-source errors and moreover which error types are more difficult to recognize by the subjects. The hypothesis that the majority of erroneous internalized (fossilized) linguistic forms can be traced back to bi-source errors can be proved and moreover supported when observing the subjects' response to the different stimuli containing bi-source errors. The assumption in taking this test is that the subjects will have more difficulty to locate the errors in the sentences which contain bi-source errors than the sentences which contain mono-source ones i.e., either inter or intra errors. In other words, because the bi-source errors are the errors that are committed more frequently and also to overcome them the learners have to struggle with two intervening sources at a time, i.e., both L1 and L2 and consequently more 'difficult' to recognize and eradicate. They face more difficulties in recognizing these erroneous forms as errors than the other mono-source errors .

For this purpose, a 40-item *GJT* was constructed. The subjects are required to identify any incorrect items in the collection of the sentences. It has to be noted that for clarity and assurance, the subjects are required to underline the part they identify as incorrect. In this way, the researcher can be certain enough that they have consciously located the incorrect items which have been purposefully selected and placed in the sentences, not identifying the other correct parts as incorrect . The table above shows the items, the area of the errors, and the source of the

errors [appendix 4]. It can be understood from the table that the test contained 11 sentences including only interlingual errors. The deviant form below is an example of the first item in the table.

no	Error area	Source	No	Error area	Source	no	Error area	source	No	error area	source
1	Preposition insertion	mono intra	11	voice	bi	21	inversion	mono inter	31	noun misuse	mono intra
2	Voice	bi	12	preposition - gerund	bi	22	rel. prono. misuse	mono inter	32	agreement	mono inter
3	Voice	bi	13	preposition insertion	bi	23	correct		33	det. misuse	mono inter
4	Correct		14	correct		24	Agreement	bi	34	although but	mono inter
5	Preposition insertion	bi	15	preposition insertion	mono inter	25	participle	mono intra	35	article deletion	bi
6	Preposition insertion	bi	16	noun clause misuse	bi	26	agreement	bi	36	adj. misuse	mono intra
7	Resumption	bi	17	inversion	mono intra	27	agreement	bi	37	adj. for adverb	bi
8	Adv. Clause misuse	bi	18	deletion	bi	28	agreement	mono inter	38	clause for ph.	bi
9	Relative pro. Misuse	mono inter	19	agreement	mono inter	29	article deletion	bi	39	tense misuse	mono intra
10	adj. clause misuse	bi	20	subordinator insertion	mono intra	30	article deletion	bi	40	Adj for adv.	bi

Table 6 including the items of the grammaticality judgment test, the area of errors and their sources, emphasizing bi-source errors

ED: Most Iranian students do not enjoy from their study in their universities.

2. Error Analysis Processes

Ellis¹⁶⁶ has presented three methods of EA according to the size of the sample in order to collect and finally analyze errors : a) a massive sample including several samples of language use from a large number of learners in order to compile a comprehensive list of errors, representative of the entire group. b) a specific sample consists of one sample of language use from a limited number of learners, and c) an incidental sample involves only one sample of language use

¹⁶⁶ Op Cit, P: 49.

produced by a single learner. The present study has preferably selected the first model as we have been dealing with large groups of learners and when errors are repeated more frequently by different learners, it can be more significant than considering only one specimen. To this procedure, Lott¹⁶⁷ adds that using free compositions as well as spontaneous conversations are suitable ways of identifying learners' errors, and consequently the study has preferably resorted to the data extracted from the subjects' writings.

To this purpose, the subjects who participate in the experiment, not knowing the purpose of the study, are exposed to free writing compositions and then in later steps their writing, in order to identify their errors, are analyzed and the committed errors are then cumulated and interpreted. In the next step, the collected errors are classified and provided with labels and put under scrutiny for interpretation.

a. Identification and Labeling of Errors

To fulfill the second step, i.e., identifying errors and giving certain labels to them, the researcher has preferred to analyze only morphosyntactic errors because the main goal of this research is working on errors of structure and not lexicon or phonology. Any lexical or spelling errors, not having been the topic of our discussion, have also been discarded. The norm for selecting and labeling any deviant form as "error", Lennon's interpretation has been adopted by basing our judgment on any deviation from the norms of the TL as he says: "A linguistic form or combination of forms which, in the same context and under similar conditions of production, would, in all likelihood, not be produced by the speakers' native speaker counterparts."¹⁶⁸

Meanwhile, the samples are just examples of deviant forms selected for our purpose and to account them as our data, all errors presented have to appear more

¹⁶⁷ David Lott. 1983. "Analysing and Constructing Interference Errors." In *ELT* 37 :3. PP: 256-261.

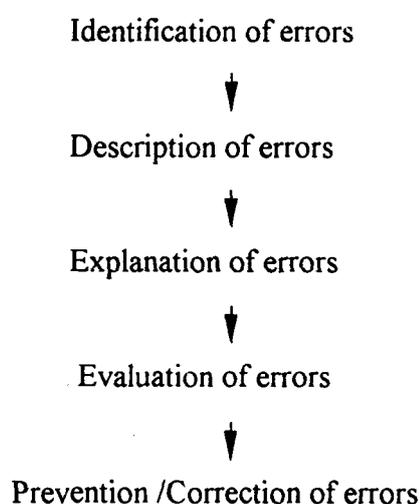
¹⁶⁸ Op Cit. P: 180.

than five times in our analysis. In other words, the errors with low frequency are not the aim of our interpretation as they are “random errors” as Corder calls them or mistakes, the occurrence of which do not follow regular patterns.

However, Sridhar¹⁶⁹, proposes a more simplified procedure:

1. Analysis of the sources of errors (eg. mother tongue interference, over-generalization, inconsistencies in the spelling system of the TL etc.)
2. Determination of the degree of disturbance caused by the error (or the seriousness of the error in terms of communication, norm, etc.). However, as the errors here are considered and interpreted in similar modality and context, the communicative aspect or the contextual properties of the errors have been disregarded.

On the other hand, one of the most ordinary methods of error analysis, as Els et al¹⁷⁰ (1984) have presented, follows the steps given below:



The classification cited above is too general to include any detailed analysis of learners’ errors and besides as one of the pitfalls discussed by Els is that first it is very hard to identify errors since “the notion of errors presupposes a norm, and norms, in turn, are dependent on, amongst other things, the medium (spoken and written), the social context (formal and informal) and the relationship between the

¹⁶⁹ Op Cit, P: 222.

¹⁷⁰ Op Cit, P: 47.

speaker and hearer...” and it is added that for something which may be an error in isolation may be acceptable in context or vice versa. To this classification, we can also add what Corder¹⁷¹, as a method of describing deviations, has presented. He has discussed the following major steps which, to some extent, are similar to what has been presented above:

- One) recognition of idiosyncrasy,
- Two) description, and
- Three) explanation.

He, besides, claims that two types of errors in general can be presented and interpreted : authoritative and plausible. An authoritative interpretation is applied to the situation when we ask the learner to state his intention in mother tongue for producing a certain erroneous form while a plausible interpretation is attributed to the situation where the learner is absent, and we have to do the best we can do to infer what he intended to say from his utterance, its context, and whatever we know about him. As a result, he proposes a semantic-based model. Following this model, we understand that errors are classified according to the following format:

	Graphological phonological	Grammatical	Lexico-semantic
Omission			
Addition			
Selection			
Ordering			

However, he, by presenting an example, claims that this method of describing errors suffers from some pitfalls, the most important of which being the fact that it does not cover perfectly all aspects of deviation. He resorts to the example of an error when a learner says:

¹⁷¹ Op Cit, P: 370.

ED: I am waiting here since three o'clock.

He states that the error here is not wrong selection or omission by selecting *am* in place of *have been*. Instead, he has selected the wrong tense as he hasn't yet mastered the tense system of English and this problem can not be applied to any of the cases stated in the table above.

Dulay and Burt¹⁷² in their study proved that most intralingual errors were deviations from the norm in L2. These intralingual phenomena are investigated by studying 513 errors of 179 Spanish-speaking children between 5 and 8 years old. The data obtained showed the following deviant forms:

- Developmental errors : those errors that are similar to L1 learning errors (intra)
- Interference errors : those errors that reflect Spanish structure (inter)
- Unique errors : those errors that are neither 'developmental' nor 'interference' errors.

Considering the methods discussed above, the author has preferably resorted to the traditional EAH which can be said to have been following a uniform method of analyzing errors consisting the identification of errors and providing them with suitable labels which depends on their linguistic complexity and the exact nature of the deviation of the items.

b. Classification of data into error types

The next step after preparing the necessary data or gathering the errors and classifying them under certain areas or labels is subdividing the errors into their sub-categories. This is only after this step that the sources of the errors are possible to identify and to explain .

Ellis¹⁷³ believes there are different ways of explaining errors, one of which as the simplest way is introduced to be based on a traditional EA undertaken for

¹⁷² H. C. Dulay & M. K. Burt 1974b. "You can't Learn Without Goofing , An Analysis of Children's Language "Errors". In *Error Analysis Perspectives on Second Language Acquisition*. Edit: J. C. Richards. London: Longman. PP: 95-123.

¹⁷³ Op Cit, P: 54.

pedagogic purposes. This method is helpful because “the linguistic categories can be chosen to correspond closely to those found in structural syllabuses and language text books.” He as an alternative also quotes the method of error analysis employed by Politzer and Ramirez (1973) in their study. They begin with more general categories such as morphology, syntax, and vocabulary. Both these procedures, as Ellis¹⁷⁴ claims, are capable of detailed description and quantification of errors. Additionally, the method Dulay, Burt, and Krashen used to classify errors is called surface strategy taxonomy. They put errors into categories of omissions, additions, and regularizations. They claim that this method is promising as “it provides an indication of the cognitive processes that underlie the learner’s reconstruction of the L2.”

To classify the errors, Richards and Lott¹⁷⁵ have introduced their own taxonomy. In this model of classification, errors are first of all classified under two major groups: errors of performance and errors of competence. However, errors of performance are committed by both native speakers and L2 learners. Corder has called these deviations ‘mistake’ and that the causes of these deviations are when the speaker suffers from stress, indecision, or fatigue. Errors of competence occur when learners misapply or misinterpret L2 rules. In fact, we, as language teachers, are concerned with these type of errors which make most difficulties for the learners. Corder, moreover, states that, using some strategies, we can identify the sources of some errors. He suggests that we can resort to “authoritative interpretation” of errors when the learner is asked to give his/her comments on the committed errors. Of course, this is possible when the subjects are available. To this, Tarone¹⁷⁶, when discussing the elicitation of data, adds that both primary data (learner performance in communication) and secondary data (learner comments upon his/her own primary data) should be used. In other words, the secondary data of Tarone here correlates with what Corder has called “authoritative interpretation”. As a result of these suggestions and in order to give a clear and

¹⁷⁴ Ibid, P: 54.

¹⁷⁵ Op Cit, PP: 256-261.

reliable interpretation to the labels used for the sources of errors and to give them the distinct sources of inter- or intra- labels, the researcher has frequently tried to turn to the learners and inquired them in order to introduce the exact source of their errors. Astonishingly, he observed that the learners when producing most errors could not introduce a certain cause which help the researcher to trace the sources. For some limited cases, they could discuss the sources of interference, but for most cases they could not put any acceptable interpretation for the errors they produced. In other words, they did not even consider their deviations as erroneous. Above all, they showed their astonishment in producing some obvious deviant forms, but they could not introduce any specific reason for their production. As a result, Corder's authoritative interpretation was not effective at least for these specific students and in this particular situation. In other words, there are multiple pressures such as L1 interference, L2 developmental errors, the training effect, lack of knowledge, etc. which affect learners' performance and to trace them all in learners' interlanguage is not possible. For this reason, the following classification is proposed as a part of the hypothesis which is the goal of the present study. In the following scheme, and as the first step, the errors are classified into two major groups of mono-source and bi-source syntactic errors then each error type will be subdivided into smaller categories.

i) Mono-source errors

Mono-source errors are defined to be those errors, the source of which pertain only to the interference of learners' L1 or L2, and not both. For example,

ED: The bird flied over the house.

is an example of over-extension of English past participle rule which is over-generalized to regular verbs and it is an example of intra-lingual error because the learner here is concerned only with one source of error and they are also called mono-source errors because the source of this certain deviant form can be traced

¹⁷⁶ Op Cit. PP: 181-191

back only to English. As a second example to be mentioned here is over-generalizing present participles in the following example:

ED: The most important factor to select a job is *interesting*.

The source of the specific error in the ED above is English and not Persian because this form i.e., present participle, is absent in Persian and as a result it can be stated to be a mono-source or intralingual error. On the other hand, the example below is an error of transfer:

ED: He enjoyed from the film.

The preposition 'from' in this ED has been transferred from Persian into English, or this is an interlingual and mono-source error.

ii) Bi-source Errors

To identify the sources of errors with enough certainty is not an easy task.¹⁷⁷ This claim can be supported when the discrepancy among the ideas of the scholars discussing error analysis and the issues related to the sources of errors are observed. Richards¹⁷⁸ has claimed that the sources of most errors are intralingual, while Tran-Thi-Chau¹⁷⁹ has proved them to be interlingual. However, to identify the sources of errors with enough certainty is a hard task and this difficulty has been observable throughout the literature. This can validate the hypothesis that the most cautious way of interpreting the sources of errors is attributing them to both sources inter- and intra- or classifying them under the category of bi-source errors. To make the point clear, the examples below can demonstrate some of this difficulty:

ED: Smoking cigarettes is caused lung cancer.

To trace the exact source of the deviation in ED above is almost difficult as the source of misusing the passive can be attributed to both L1 and L2, or in other words, it can be the cause of L1 interference or learner's L2 developmental strategy. Ellis¹⁸⁰, suggesting that an error can be applied to both these two

¹⁷⁷ See Tran-Thi-Chai, 1975; Richards, 1971b; Slinker, 1974.

¹⁷⁸ Op Cit, P: 177.

¹⁷⁹ Op Cit, PP: 119-143.

¹⁸⁰ Op Cit, P: 62.

phenomena, proposes a doubtful account of the difference between the concept of transfer as it is and intralingual : “ where one researcher identifies the source of an error as transfer, another researcher identifies the source of the same error as intralingual.”

The problem discussed above may be more clearly demonstrated and investigated in the misapplication of third person singular *s* and the definite article *the* distinctively. The deletion of third person, singular *-s* can be an instance of an inter-lingual error as this phenomenon does not exist in Persian, and besides this deletion, as Doskova¹⁸¹, claims can be an instance of over-generalization since in English all persons take the zero verbal ending except the third person singular in the present simple and consequently its omission can be accounted for the heavy pressure of other endingless forms and this endingless form is generalized for all persons. Therefore, it can be concluded that the errors of deleting third person singular *-s* can be attributed to both L1 and L2 or in other words, it is a bi-source error. As a result of these difficulties, the researcher has come to the conclusion that the sources of some errors are traced back to both L1 and L2, and consequently they are labeled as bi-source errors. While there are some other errors which can be traced back only to L1 or L2 and not both like EDs mentioned above, and consequently they can be labeled as mono-source errors.

The case is, however, the same with the errors of misapplying the definite article ‘the’ for Iranian L2 learners of English. In using this article, these learners face two obvious hurdles. The first is their L1 interference as there is no equivalent item in Persian that can syntactically correspond with ‘the’. Therefore they will have to be struggling with L1 interference. On the other hand, exceptions and rule inconsistencies in applying ‘the’ in English have made using this article a very difficult task. One of the main causes of intralingual errors is the inconsistency of L2 grammar rules.¹⁸² In other words, when LLs find some L2 rules obscure or inconsistent, they turn to L1 or other available rules even L2 rules to fill their

¹⁸¹ L. Duskova, 1969. “On Sources of Errors in Foreign Language Learning.” In IRAL 7. PP: 11- 36.

¹⁸² See Ellis, 1994; Zobl, 1983; James, 1980.

information gap. Therefore the learners in this respect turn to intra-lingual transfer to overcome their deficiencies. All these cases and the ones like this have suggested the fact that the Iranian L2 learners of English resort to a large number of errors as they have to struggle with two sources of interference at a time ,i.e., L1 and L2, and for this reason the errors that fall under this category are called bi-source errors.

Besides all the facts mentioned above, one major drawback of the VW of the CA is its failure to predict the sources of errors . If the sources of some errors pertain to both sources, one useful step here is overcoming this shortcoming of the VW of CAH.

On the other hand, in our classification, there are some errors which are labeled as unique. The sources of these errors can not be easily attributed to any particular source and also that they have very low frequency as well as having no definite and regular pattern . The following examples can make the point clear.

ED: We would have been many problems. Or

ED: If we have been many properties, we fail.

Both EDs above demonstrate obvious deviations from the norms of the target language ;however, this is not easy to talk about the sources of the errors as first they do not occur very frequently and second they do not follow a regular pattern in their system. Besides, most of these errors, as will be discussed, occur as a result of lack of enough knowledge especially among adult beginners and elementary learners of English, and as a result, they simply use the deviant L2 forms for which there is no definite explanation. They are sometimes called *induced errors* as proposed by Ellis¹⁸³ . These errors are, moreover, claimed to be the result of instruction or training, or it may be proposed that they occur when learners are led to make errors by the nature of instruction which learners receive¹⁸⁴ . It can be expected too that the errors for which we can introduce no source either in L1 or L2 build up the approximative system of the learner. In other words, this is the

¹⁸³ Op Cit, P: 60.

¹⁸⁴ See Richards, 1974. PP: 174-76

system which is a combination of L1 and L2's unique errors and are capable of constructing a distinct system, something like the approximative system proposed by Nemser. These errors are not systematic and therefore do not reflect competence. They are cases when learners internalize faulty rules derived from instruction and in such cases the resulting error will reflect their competence. However, instruction may constitute one source of what Dulay and Burt call "unique errors" while Fisiak¹⁸⁵ has called them "pedagogical errors". In other words, the researcher will have been discussing and giving emphasis to the errors which seem to fall within definite, definable patterns and where a consistent system can be observed among them, and consequently these systematic errors may be regarded as rule-governed because they follow the rules of the learners' L1 grammar or can be the consequence of over-generalization. To sum up, two error types will be neglected throughout the study: those with low frequency and those which are considered to be unique while the goal of the present study is giving the main body of discussion to bi-source errors.

C. Preparing the frequencies

After the errors are gathered and put into concrete groups, the frequencies of errors can be an indication of their seriousness. This is only after this step that we can put our judgments on the items and areas which are regarded difficult or most problematic. The error types with high frequency can have enough indications of learners' interlanguage. The errors with low frequencies will have to be ignored as the low occurrence of the errors can not be significant to the analyst.

D. Identification of area and sources of difficulty

The present study, will first apply EA to collect the data, identify the errors, and analyze their sources, then in the next step and in order to identify the area of difficulty of the bi-source errors, CA can help because the sources of these errors are naturally attributed to both L1 and L2. In case of intra-lingual errors, EA by itself may suffice, but in case of inter-lingual, CA is employed to contrast the

¹⁸⁵ Jacek Fisiak. Ed. 1981. *Contrastive Linguistics and The Language Teacher*. London: Pergamon Institute of English. PP: 7-9

L1 and L2 structure to demonstrate the causes of interference more clearly. Contrastive studies are undertaken in order to describe or discover the differences, while EA confirms or falsifies the prediction of the theory. However, EA does not explain anything explicitly. It shows error types, not why they occur. In order to understand why they occur the information provided by CA is necessary. To this suggestion, Tran-Thi-Chau¹⁸⁶ adds that EA alone cannot predict more than half of the errors and the situation is the same for CA. In other words, unless an EA uses CA insights, it cannot explain the causes of a large number of errors, or the interlingual errors. Moreover, this is clear that L2 morphosyntactic errors can be identified through error analysis, but the causes of their occurrence and the sources of some of these errors can be sufficiently explained by using CAH. To this purpose when learners commit mono- or bi-source errors, this is necessary to demonstrate the sources of some of these errors by contrasting the L1 and L2 structures. Besides resorting to the CA, it is essential to select an appropriate linguistic theory for this comparison which seems inevitable. On the other hand, for a description of errors through contrasting them, it is required to follow the principles of a linguistic theory. In other words, the more adequate the linguistic theory, the better will be the linguistic description of errors. The study, to this purpose, prefers to adopt a phrase-structure grammar approach in order to contrast the structures in question. The reason for this selection is that the sentence patterns of English and Persian can be as closely and as adequately as possible modified and as a result, some of the sources of the errors can be identified and discussed in detail. This model is more powerful than a model based on a finite state process and does not fail in the same way¹⁸⁷.

¹⁸⁶ Op Cit, P: 121.