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ABSTRACT

Twenty-two reports of research focusing on the composing processes of college students of English as a Second Language are reviewed. The research, reported between 1982 and 1989, consists of case studies of various issues: (1) general accounts of the second language composing process; (2) revision; (3) attention to rhetorical form; (4) monitor use; (5) abstracting; (6) reader awareness; and (7) planning. The major findings of the research are discussed, and particular reference is made to the most frequently and/or extensively addressed issues: recursion, variation in the second language composing process, planning, transcribing, revising, first language use in second language composition, audience awareness, monitoring, and the transfer of first language writing skills to second language composition. The studies' methods, reporting, and interpretation practices are also described and critiqued. It is concluded that while the studies' findings are interesting, provocative, and potentially useful, their credibility is not beyond question. (MSE)

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A CRITICAL REVIEW OF ESL COMPOSING PROCESS RESEARCH

TONY SILVA, PURDUE UNIVERSITY, 1989

U.S. DEPARTMENT OF EDUCATION  
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In the 1980's, there has been a surge of interest in empirical research on the composing processes of ESL writers. This research is important not only for ESL practitioners, but also for anyone interested in a comprehensive theory of writing or writing instruction. This paper surveys twenty-two reports of research that focus primarily on the composing processes of ESL college student writers. This research, reported between 1982 and the present, is comprised of case studies (most multiple) that address a variety of issues: (1) general accounts of L2 composing processes (Lay 1982, 1983; Zamel 1982, 1983; Pfingstag 1984; Brooks 1985; Diaz 1985; Galvan 1985; Hildenbrand 1985; Johnson 1985; Raimes 1985, 1987; Martin-Betancourt 1986; and Arndt 1987), (2) revision (Heuring 1985, Gaskill 1986, and Hall 1987), (3) attention to rhetorical form (Jones 1982), (4) monitor use (Jones 1985), (5) abstracting (Dicker 1986), (6) reader awareness (Rorschach 1986), and (7) planning (Jones and Tetroe 1987).

This paper will provide an account of the major findings of this body of research--with particular reference to the most frequently and/or extensively addressed issues: recursion, variation in L2 composing processes, planning, transcribing, revising, L1 use in L2 composing, audience awareness, monitoring, and the transfer of L1 writing skills to L2 composition. It will also include a description and critique of the studies' methods and reporting and interpretation practices. In essence, it will suggest that while these

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studies' findings are interesting, provocative, and potentially very useful, their credibility is not beyond question.

#### AN ATTEMPT AT A SYNTHESIS OF MAJOR FINDINGS

(To avoid undue distraction, the studies cited in this section have been number coded; see Table 1 in the appendix for the number codes.)

#### Recursion

There seems to be unanimous agreement that L2 composing processes are recursive, not linear. A number of studies explicitly note this [2,3,4,5,9,12,20]; the rest seem to take it as given.

#### Variation in L2 Composing

There is also widespread agreement that there is a lot of variation in L2 composing behavior--that there is no clear profile of the L2 writer [14]. Differences between L2 writers' processes are noted in the areas of approaching a writing task [19], prewriting [4], planning processes [21], and in the ability to use flexible large scale plans [12]. Distinctions are also reported with regard to audience visualization and anticipation [7], the ability to respond to all parts of a rhetorical problem [12] the amount of time used in completing a writing task [7], and in general composing styles and problems [12].

#### Planning

In general, the researchers reported that their subjects did not plan much [6,14,15,21,22] and that when they did, they focused on low-level concerns [15]. Moreover, their planning did not seem to be greatly influenced by the specification of audience [14], task [21], or topic [7] type. It was also observed that elaborate and inflexible plans proved to be a hindrance rather than a help [19]. With regard to level of L2 writing ability, it was found that skilled writers did more planning overall [1,4,22] (which resulted in more material and development in texts [17]). They also did more planning in their L2 [21], did more abstract planning [21], and had a higher level of L2 proficiency [21], than their unskilled counterparts. It was noted that L2 proficiency was only one factor in planning and that while low L2 proficiency reduced the amount of planning done, it did not affect its quality or pattern [21]. Also, this planning pattern was believed to transfer from L1 to L2 writing [21] (See Jones and Tetroe (1986) for an in-depth treatment of planning in the L2 composing process.)

### Transcribing

Transcribing (that is, putting ideas into visible language) was found to be a complicated process for the writers studied. They employed two options alternately: (1) encoding directly into the L2, and (2) encoding indirectly--putting their meaning first into their L1 and then translating it into the L2 [17]. Related findings suggest that subjects with lower levels of L2 proficiency focussed more attention on transcribing [10] and found transcription to be rather slow going [14].

### Revising

The findings indicate that the subjects revised mainly to work out and clarify ideas [14,22], to ensure successful communication of information, and to provide cohesion [20]. They revised throughout the composing process [14], but primarily during drafts ([4,14,16]. Their revisions were mostly surface changes [4,16] concerned with the preservation of meaning at the lexical level [10,20]--addition and substitution were the most common linguistic operations employed [20]. L2 proficiency seemed to be a factor in revising. A higher L2 proficiency level corresponded to revising ability and the degree of emphasis put on finding grammatical inaccuracies [10]. It was also associated with more rereading [16,22], and reading larger chunks of text [10] as well as with devoting more attention to revision while drafting [10], doing more revision [7,22], and with not always writing and revising simultaneously [8]. Overall, revising patterns seemed to be similar in the subjects' L1 and L2 writing [16]. In both languages, revision was recursive [20], addressed the same features [20], and seldom altered meaning [16]. There were particular similarities in terms of total revision frequency, frequency of surface and text-base changes [16], and in the percentages of revisions between and during drafts [16].

A distinct revision pattern for the skilled ESL writers in these studies seemed to emerge from the research findings. The skilled L2 writers were better at evaluating writing tasks [10] and distancing themselves from and assessing their texts [7]; they were more able to balance revising and planning and transcribing--to give revising a complementary and productive role [10]. They focused on the sense rather than on the parts of a text [7]. They could revise beyond the word and phrase level [7] and did not limit their revision to meaning preserving changes [10]. They made more [7,22] and a greater range of changes [10], used more revision types [10], were less

preoccupied with low level concerns [10], and could postpone editing until the later stages of the composing process [1]. (See Heuring (1985), Gaskill (1986), and Hall (1987) for studies devoted to L2 revising.)

### L1 Use in L2 Composing

L1 use in L2 writing was common in the studies examined; in fact, the use of two languages was often viewed as one of the basic differences between L1 and L2 composing. The L1's role was that of primary source of content and alternate medium of expression [17]; it was used variously for keeping the composing process flowing smoothly [17], setting abstract rhetorical goals [21], local planning [12], getting a stronger impression or association of ideas [2,4], and making meta- [21] and side [12] comments.

Extensive L1 use in L2 writing seemed to be an unsuccessful strategy for those subjects with a fairly advanced level of L2 proficiency [17]. It resulted in less extensive planning [21], more translation [17], and less material in and development of the text [17]. However, for those with a low level of L2 proficiency, more L1 use was reported to correspond to better ideas, organization, detail, vocabulary, and sentence structure [2,4]. In short, L1 use seemed necessary and advisable for the less L2 proficient writers, but inadvisable and counter-productive for the more L2 proficient [12]. One variable that was seen to influence L1 use in L2 composing was that of topic. Familiar topics, like family and home country, generated more L1, but the L1 was not so useful with topics read about in or associated with the L2 [2,4,12]. Other factors seemingly related to a decrease in L1 use included more time in the USA (i.e., in an L2 environment) [12], the acquisition of English in communicative situations [12], high motivation to write well in

English [12], a high level of confidence in L2 writing ability [12], a similar writing system in the L1 and L2 [12], and a lot of opportunity to speak English [17]. (See Lay (1982, 1983), Johnson (1985), and Martin-Betancourt (1986) for extensive treatments of L1 use in L2 writing.)

### Audience Awareness

On this issue, findings were mixed. Some studies indicated a strong role (positive and/or negative) for audience in L2 writing. Some researchers reported a high level of audience awareness, with subjects clearly writing for their audience [3], taking their readers' views into account [4], and seeing the text as representative of themselves [7]. In one case, a particular audience seemed to have a distinctly negative effect on L2 writers' work, causing them to shift their main focus from ideas to formal concerns [18]. Other studies, however, suggested a rather weak role for audience in L2 composing. In these, audience did not seem to influence planning, content or organization [14,22]. Subjects didn't appear to gear their texts to their audience, review their texts in light of their audience, or use their audience as a generating force [19]. They failed to provide connections between ideas and to anticipate that readers might not share their world knowledge [19]. (See Raimes (1985,1987), Rorschach (1986), and Arndt (1987) for more information on this issue.)

### Monitoring

In one study it was hypothesized that extensive monitoring of grammatical features of texts was not necessarily an effective L2 writing

strategy and could, in some cases, be an impediment. Moreover, overuse of such a monitoring procedure was seen as a composing process problem that could reflect a lack of acquired competence in the L2 and result in shifting the writer's attention from content to form and preventing the writer from developing a gist. This presumed lack of acquired competence was also associated with longer and more frequent pauses and shorter chunks being written between pauses as well as with little short-term memory for the writer to use in evaluating the text against a content plan, an increase in the amount of time used, and a decrease in the amount of written output [13]. (See Jones (1985) for more on this issue.)

#### Transfer of L1 Writing Skills to L2 Writing

There is some evidence to suggest that L1 writing strategies do transfer to and can play a central role in L2 writing [21]. It was found that those subjects who had written extensively in their L1 brought their competencies with regard to sense of audience [7], variety of composing strategies [7], implicit models [7], and planning patterns [21] to their L2 writing. Further, it was observed that those subjects who did not write competently in their L1 were not likely to do well in their L2 writing [7]. (See Brooks (1985) and Jones and Tetroe (1986) for more on skill transfer.)

#### QUESTIONS ABOUT METHODS AND REPORTING AND INTERPRETATION PRACTICES

While the body of research in question here appears impressive in terms of the number of studies and subjects involved and the intuitively appealing findings it presents, one must ask how credible these studies are. Are they



valid? Reliable? Comparable? Are their findings reported adequately and interpreted reasonably? Do they comprise a body of information that is useful, coherent, and convincing? How secure can we feel about using these findings to inform theories of L2 writing and/or L2 writing instruction? Addressing the foregoing questions requires a closer look at these studies. To this end, this section of the paper will consider five important factors: subjects, writing tasks, data analysis, presentation of findings, and interpretation of findings. It will describe how the studies deal with each element and then assess their performance. My analysis of these studies has been informed in part by the following work on case study research: Hayes & Flower (1983); Hillocks (1986); Lauer & Asher (1988); North (1987); Perl (1984); Swartz, Flower, & Hayes (1984); and Yin (1984).

### Subjects

Though the reporting of subject characteristics is uneven, a general description of the sample can be attempted. In all, there were roughly one-hundred subjects. There were twice as many women as men. Spanish speakers constituted almost one half of the subjects; Chinese speakers, about a quarter. Sixteen other language groups made up the remainder. About two-thirds of the subjects had an advanced level of L2 proficiency; about a third were intermediates; only a tiny fraction were beginners. Subjects varied widely in terms of L2 writing ability (from very unskilled to very skilled), age (from eighteen to forty-four), time spent in an L2 (English-speaking) environment-typically the USA or Canada (from two weeks to twenty-five years), educational level (from first-semester freshmen to seasoned graduate students), major field, amount and type of L2 instruction,

and prior instruction in writing. Subjects were primarily chosen on the basis of their L1, L2 proficiency, L2 writing ability, or the flexibility of their schedules; in at least seven studies [5,7,9,14,15,18,20], some or all of the subjects were current or former students of the researcher.

A critical examination of subject-related matters in these studies gives rise to a number of concerns. First, the sample constituted by the pool of subjects from these twenty-two reports seemed rather unbalanced and unrepresentative with regard to the variables of sex, L1, and L2 proficiency. Second, the reporting of important subject variables was often incomplete. While all the studies reported their subjects' first languages, on the rest of the variables mentioned, some studies did not report adequately or at all. This was the case in four studies regarding sex of subjects; in six, regarding educational level; in eight, regarding L2 writing ability and time spent in an L2 environment; in nine, regarding major field and L2 proficiency level; in eleven, regarding L2 instruction and writing instruction; and in twelve, regarding age. Incomplete descriptions of subjects or any other important element in these studies are rather problematic since comprehensive description is one of the defining characteristics of case study research--as well as of qualitative descriptive designs in general. (Here and hereafter, see Table 1 in the appendix for details on particular studies when not provided in the text). Third, researchers using their current or former students as subjects in their studies seemed to fail to recognize or acknowledge the possibly prejudicial effects of such a practice (e.g. subjects might aim to please by adapting their composing behaviors to fit their teacher's implicitly and/or explicitly expressed views on writing). On a positive note, six studies [1,8,9,16,18,20] were exemplary in their description of subjects.

## Writing Tasks

As in the case of subjects, a general account of writing tasks involved in the studies can be sketched. Writing tasks differed both in terms of task characteristics and the conditions under which writing was done. Topics varied widely and were seldom repeated across studies. With regard to genre, the tasks were typically some sort of short essay, whose aims (purposes) seemed to be predominantly informative/persuasive and whose modes (patterns of arrangement) seemed to be fairly evenly divided between narration, description, exposition/classification, and evaluation/argumentation. (Genre, aims, and modes were typically unspecified, but implicit in the task descriptions in this study). Audience, when specified, was normally a peer, teacher, examiner, or the researcher. The number of writing tasks ranged from one to all writing tasks done in one semester; the number of sessions per task, from one to an unlimited number; the amount of time per session, from twenty minutes to unlimited time. With regard to language, most tasks called only for the L2, but a few solicited L1 writing also. Most writing was done under laboratory conditions, and finally, thinking-aloud protocols were elicited in twelve of the studies [1,2,4,6,10,12,14,16,17,19,21,22].

Reporting of variables is also an issue here. Though the reporting of relevant variables was more complete for writing tasks/conditions than for subjects, it was still somewhat uneven. Number of sessions was not reported in one study; sessions per task, in two; time per session, in four; topic, in five; conditions (physical context), in six. Audience was not indicated in eleven studies--this may be more a problem in design, that is, specification of audience in writing tasks, than a reporting matter. Because of the widely varying understanding of the terms, genre, aim, and mode, and because of the

often implicit nature of these factors in writing topics, it was rather difficult to make judgements about their specification or reporting in particular studies. However, these features appear to be consistently underspecified in this research.

Another task-related issue is the use of thinking-aloud protocols. In my view, it is unfortunate that more studies did not collect these since the studies that did typically provided richer and more interesting data than those relying on simple observation and/or retrospective reports. Finally, a number of studies [9,10,14,16,17,19,20,22], deserve recognition for superior work in terms of their handling of writing tasks and related data collection.

#### Data Analysis

With regard to data analysis, two important considerations are the instruments of analysis and their reliability. A variety of instruments were used in this body of research for analyzing process, product, and personal variables. In many cases, researchers developed their own instruments; at times, pre-existing, commonly-known instruments were employed, for example: Perl's (1984) composing process coding system [10,12,15,17,19,22], Faigley and Witte's (1981) textual revision typology [10,16,20], the TOEFL [16,20] and MTELP [6, 14, 22] tests of L2 proficiency, and the Jacobs et al (1981) ESL Composition Profile--an analytic measure of L2 writing ability [10,16]. Reliability estimates for composing process coding systems (representing the level of agreement between coders) were provided in only five studies. In these cases, reliability seemed quite adequate.

The foregoing raises a number of concerns. First the very infrequent use of common and more-or-less standard instruments when appropriate and

available makes the findings of different studies very difficult to compare or synthesize. Problems in comparison or synthesis are especially serious since the findings of case studies are much more (some would say only) meaningful in the aggregate--this is because, individually, they deal typically with small, non-random samples and thus do not normally produce generalizable findings. Second, in seven of the studies, the categories used for coding the composing processes of subjects were not readily apparent. This situation undermines replicability as well as comparability. Third, the apparent disregard for reliability of analytic procedures in the great majority of these studies seems to reflect a lack of rigor and raises serious questions about the meaningfulness of their findings. On the bright side, four studies [10,14,17,22] were exemplary in their data analysis procedures and reporting.

#### Presentation of Findings

In the majority of the studies examined here, the presentation of findings is reasonably accessible, balanced, complete and systematic; six studies [7,10,16,17,20,22] are exemplary in this regard. However, there are problems in some other cases. Seven studies, in my opinion, display a lack of balance--that is, challenging or incongruous data seemed to not be reported or to be deemphasized, resulting in what seems to be a rather one-sided presentation. Eight studies seemed incomplete--that is, selective, with missing data for some students on some of the variables examined--and unsystematic, largely anecdotal in style.

#### Interpretation of Findings

As was the case for presentation of findings, the majority of the studies reviewed here put forward quite reasonable interpretations of their findings; three studies [7,10,12] did an outstanding job in this area. However, some studies' interpretations were rather questionable. In ten cases, classroom implications were offered even though the studies did not focus on classroom instruction--this problem may be a result, in part, of pressure from journals or committees to make all research reports immediately relevant to classroom concerns). In nine studies, findings were, in my view, unjustifiably generalized from small, non-random samples to the entire population of ESL writers or large subgroups thereof. Finally, eleven studies made cause and effect claims that seem very questionable in light of the absence of any rigorous control of variables.

#### CONCLUSION

Any response to the questions posed earlier about the credibility of this body of research must be mixed. Though a few of the studies [7,10,16,17,20,22] are outstanding, in my view, the research as a whole exhibits numerous weaknesses. Its validity is threatened by a somewhat unbalanced sample, the unreflective use of researchers' former and current students as subjects, the infrequent use of think-aloud protocols, and problems with the presentation of findings (in terms of balance, completeness and systematicity) and their interpretation (in terms of classroom implications, generalizations, and cause and effect claims). Its reliability is called into question by the incomplete specification of composing process coding categories and procedures and the lack of reliability estimates with regard to such coding. Furthermore, the incomplete description of subjects

and specification of writing tasks and the infrequent use of common instruments of analysis when available and appropriate undermine comparability and replicability. Consequently, it appears that this research represents a body of information that, though quite interesting and potentially very useful, is not altogether coherent and convincing.

All of this suggests to me (1) that ESL composition professionals need to be careful and tentative consumers of L2 composing process research--to read it closely, to not accept its findings uncritically, to realistically assess its strengths and weaknesses, to develop their own informed opinions on "what the research says;" and (2) that ESL composing process researchers need to collaborate in developing and specifying coherent research agendas and guidelines regarding appropriate research practices and procedures. In order to build upon the valuable pioneering work done so far and achieve a realistic and credible understanding of L2 writing and writing instruction, it is vital that all ESL composing process studies be conceived, carried out, reported, and interpreted in a useful, informed, rigorous, and reasonable fashion.

Finally, it is perhaps time to change somewhat the general direction of L2 composing process research, to move away from a focus on documenting similarities between L1 and L2 writers--there is clearly reason to believe that they share basic elements and patterns--and to devote more attention to how they are different so that we can better understand the special needs of ESL writers.

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## APPENDIX

### Key for Table 1

On the chart (X)=satisfactory and (0)=unsatisfactory performance with regard to: reporting on subject variables (FIRst language SEX, EDUcational background, L2 Writing ability, TIme In an L2 environment, MAJor field, L2 Proficiency, L2 Instruction, WRITing background, AGE); reporting on task variables (NUMber of writing sessions, SESsions per task, TIme Per session, TOPic, CONDitions for writing, AUDience specification); data analysis (CODing system/procedures, RELiability of coding); presentation of findings (BALance, COMpleteness, SYStematicity); and interpretation of findings (CLAssroom implications, GENeralization beyond sample, CAUse and effect claims) The judgements indicated here represent an honest attempt at an informed and principled appraisal of the studies involved.

Table 1: Assessments of Particular Studies

	F	S	E	L	T	M	L	L	W	A	N	S	T	T	C	A	C	R	B	C	S	C	G	C
	I	E	D	2	I	A	2	2	R	G	U	E	I	O	O	U	O	E	A	O	Y	L	E	A
	R	X	U	W	I	J	P	I	I	E	M	S	P	P	N	D	D	L	L	M	S	A	N	U
[1] Jones (1982)	X	X	X	X	O	X	X	O	O	O	X	O	O	X	O	O	X	O	X	O	O	X	X	X
[2] Lay (1982)	X	O	O	O	O	O	O	O	O	O	X	X	O	O	O	O	O	O	X	O	O	X	O	O
[3] Zamel (1982)	X	O	O	X	O	O	X	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
[4] Lay (1983)	X	O	O	O	O	O	O	O	O	O	X	X	X	O	X	O	X	O	X	O	O	O	O	O
[5] Zamel (1983)	X	O	X	X	O	O	X	X	X	O	X	X	X	O	O	O	O	O	O	O	O	O	O	O
[6] Pflingstag (1984)	X	X	O	O	O	O	X	O	O	O	X	X	X	X	O	O	O	O	X	O	O	O	O	O
[7] Brooks (1985)	X	X	X	X	X	X	O	X	X	X	X	X	X	X	X	O	X	O	X	X	X	X	X	X
[8] Diaz (1985)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	O	O	X	X	X	X	X
[9] Galvan (1985)	X	X	X	X	X	X	O	X	X	X	X	X	X	X	X	X	O	O	O	O	O	O	O	O
[10] Heuring (1985)	X	X	X	X	X	X	O	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
[11] Hildenbrand (1985)	X	X	X	X	X	X	O	X	O	X	X	X	X	X	X	X	O	O	O	O	O	X	X	X
[12] Johnson (1985)	X	X	X	O	X	X	O	X	X	X	X	X	X	X	O	O	X	O	X	X	X	X	X	X
[13] Jones (1985)	X	X	O	O	O	O	X	X	O	O	X	X	X	X	X	O	X	O	X	X	X	X	X	X
[14] Raimes (1985)	X	X	O	X	X	O	X	O	X	O	X	X	X	X	X	X	X	X	X	X	X	X	O	O
[15] Dicker (1986)	X	X	X	O	X	X	O	O	O	X	X	X	X	O	X	O	X	O	X	X	X	O	O	O
[16] Gaskill (1986)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	O	X
[17] M.-Betancourt (1986)	X	X	X	O	X	X	X	O	O	X	X	X	X	X	X	X	X	X	X	X	X	X	O	X
[18] Rorachach (1986)	X	X	X	X	X	X	X	X	X	O	X	X	X	X	X	X	O	O	O	X	X	X	X	O
[19] Arndt (1987)	X	X	X	O	X	X	O	O	X	O	X	X	X	X	X	X	X	O	O	X	X	O	O	O
[20] Hall (1987)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	O	X	X	X	X	X	X
[21] Jones/Tetroe (1986)	X	X	X	X	O	O	X	O	O	O	X	X	O	X	O	O	X	O	X	X	X	X	X	X
[22] Raimes (1987)	X	X	X	X	X	O	X	O	O	O	X	X	X	X	X	X	X	X	X	X	X	X	X	X