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Dynamic Systems Theory and Variation: a case study in L2 writing¹

Introduction

As colleagues in another English Department, we have worked with Lachlan Mackenzie's publications on a day-to-day basis in our classes: *Principles and pitfalls of English grammar* is used in our practical English grammar classes and *Effective writing in English: a resource guide* is often consulted when we run into persistent writing problems. In this paper we would like to address these common points of interest from a radically different perspective, namely Dynamic Systems Theory (DST), and rather than concentrating on how grammar and writing can be taught, we will examine if and how the writing and grammar of two beginning students develops without any specific teaching.

We intend to raise one particular issue that presents a link between DST and SLA: variation. Our aim is to stimulate discussion on how variation should be viewed and interpreted, but we want to stress here that DST and its views on variation is not a theory on SLA in itself. It is merely a framework that offers a different perspective on language as a system.

The structure of this contribution is as follows. First we start out with a brief explanation of dynamic systems theory in general; then we will focus on the way variation is viewed and interpreted from a dynamic perspective. Finally we will make a first attempt at applying a DST view of variation to L2 acquisition, specifically in the writing of two beginning L2 learners of English, who wrote ten entries in their "diaries" for six weeks.

Language seen as a dynamic system

The study of complex and dynamic systems has become the focus in many different research areas and as Larsen Freeman (1997) has pointed out before us, may be of interest to SLA, too. She argues that language in general and an individual's language system in particular can be seen as a dynamic system in its own right as it includes the present

¹ We hereby would like to thank Liesbeth Doorman, who made her data available to us.

knowledge of all the individual's varieties and languages which continually interacts with internal and external forces and therefore is never the same at any two points in time. Within the larger system of a language used by a speech community, there are many sub-systems, among which the unique language systems of individuals that continuously interact with each other. Similarly, the knowledge one individual has of different languages and varieties can be considered as a dynamic system in its own right, and it will change over time due to a complex interaction of a wide range of factors, such as internal forces, the amount of exposure to the forms of the language and the attention given to them.

To make our explanation of a dynamic system and the analogy with language as a system as brief and simple as possible, let us illustrate with another dynamic system: a pile of sand. Suppose we take a small bucket and fill it with sand, turn it upside down and take off the bucket. The resulting pile of sand may be regarded as a dynamic system in its own right. Maybe the sand will keep the shape of the inner lining of the bucket, but it is more likely that sand will begin to shift some. After a while, the shifting seems to stop. In DST terms, this would be considered an "equilibrium" or an "attractor state". The shape of that pile is the result of stability in the system; apparently there is a structure in the sand that keeps the sand from shifting, which exemplifies the "self-organizing principle" of a dynamic system. Even if there are no external forces at play, this self-organizing principle will not result in an infinite stable situation because slowly but surely the pile of sand will change, among other things, because the water in the system will evaporate or sink to the bottom. The chance, however, is that the pile will change quite rapidly through external forces that will affect the system in different, interacting ways. For example, the wind may blow away sand from the outer surface or when we touch the sand, it will start shifting again. During each change of state, the system will not settle in certain states ("repeller states") and find another equilibrium ("attractor states"), some very short-lived, others of longer duration, but because of all the different interactors the system will never remain the same.

Note that the sand doesn't know it is a dynamic system, nor are there only external forces forcing it in shape. Grains of sand are not particularly social or intelligent, but are part of the system through their shape and weight. External forces will have an impact on the structure: when we add water to the sand, it is more likely to keep its shape, and only when the water seeps away, it will return to its original dry state, but it will not be the same state as the sand that was never wet.

As observers, we will be able to note change, but we will never be able to find out for this particular pile of sand how and why it took this shape and stopped shifting at some point. Even if it were possible to distil all the internal and external interacting factors from this complex system, we would never be able to tell the exact contribution to change by any of the individual factors. For one thing, none of the external factors operate in isolation, and for another thing, the system upon which the interacting external factors act is never the same because the internal system itself never remains the same. Also, the very act of trying to find out more about the structure will have an impact and destroy the temporal stability.

Though it may seem far-fetched, there are similarities between the pile of sand and language. Like the grains of sand, the different elements of a language are not linked to all other parts (though certainly more than the sand). The language system is a complex system of elements that hang together (like grains of sand literally do), that has a structure (though we hardly know what that structure is) and it is in constant flux and in interaction with its environment. In the next section, we will focus on what the different kinds of changes within a system may tell us about its development.

Variability as part of development

Variability in development has been one of the large issues in SLA. Ellis (1994) presents an overview of the different types and sources of variability in the learning of an L2. There are two fundamentally different perspectives of how we should deal with such variation. The first, and so far most dominant one, is that we are interested in the global picture of development, i.e. the general patterns that emerge when we test large numbers of individuals. The second view is to see different degrees of variation within a system at a given time as indications of development. The following quote clarifies the two different views on variability:

DST aims at explaining two levels of development with the same principles (Thelen & Smith 1994). The first level is the view from above, or the 'grand sweep' of development. At this perspective, we see global structure, similarities across subjects. For instance, when infants learn how to walk, they perform roughly the same behavior. The second level of development takes a view from below. From there, we observe the messy details: behavior that is variable, fluid, and highly context dependent. We see

for instance that not all infants use the same strategies when learning how to walk and show large variability across time. (Van Dijk 2003, 129)

If we want to learn more about development, then looking at the types and degrees of variation can give us some insight into the process. Some variability due to self regulation may originate in the system, some from outside. It can be argued that L1 acquisition results from a combination of both: there appears to be an inherent tendency in children to develop their language further and further, just like they move from crawling to walking even when they can reach their present goals easily with crawling. The following graph taken from an article by Van Geert & van Dijk (2002) may serve to clarify the "messy details" in development. It presents the development of the use of spatial prepositions (like 'in' or 'under') in a girl, Heleen, when she was between age 1;6 and 2;6:

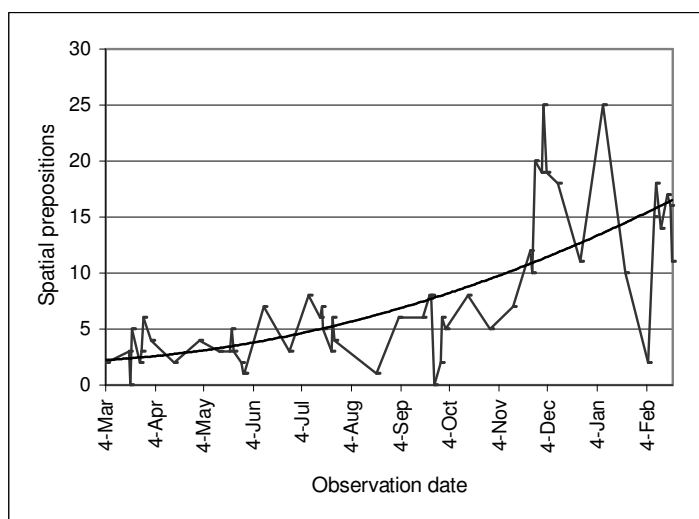


Figure 1. Raw data of Heleen's spatial prepositions, including a polynomial trend line (2 degrees) (Van Dijk 2003 p. 44)

As you can see from this figure, it is possible to draw a line representing the general trend, but that trend line is rather an oversimplification of the pattern of the raw data. Compare the frequency on 4 jan. and 4 feb. It is obvious that taking the mean of these two scores does not tell us exactly what it going on in Heleen's developing language system. According to van Dijk, this variability is viewed as an important internal developmental characteristic and not

as something externally added to the process of development, which is often viewed as "noise" in traditional statistical approaches.

We will exemplify what is meant by "noise" in traditional approaches with measuring levels of proficiency. Typically, we use tests to determine proficiency levels, but these are per definition inadequate to measure the concept we want to find out more about. Language proficiency is a complex skill and no single test is able to measure the underlying concept of proficiency in the fullest possible sense. So by using tests, we capture only part of what we want. Tests give us scores that result from two sources: the true score and the measurement error. The true score contains the information we are really interested in, in this case general language proficiency. The measurement error is caused by the inherent inadequacy of the test we used (e.g. a cloze test in which testees have to fill in blanks in a text in the foreign language) to measure true proficiency. But we do not know what part of an individual's score is the true score and what part the measurement error. In testing circles it is now generally accepted that we can learn more about the true score by looking at what individuals have in common and where they differ. The shared part most likely reflects the true score, while the differences reflect measurement error. A host of measurement techniques have been developed to statistically test this. In all techniques, eliminating the individual 'variance', the difference between individuals, plays a central role. In a way, the whole testing industry is based on this approach.

What may be considered 'noise' in traditional statistical approaches is normal 'sound' in DST. The starting point of dynamic systems theory is that a developing *system* is maintained by a flux of energy. Every developing cognitive system is constrained by limited resources, such as memory, attention, motivation, and so on. The system is in constant complex interaction with its environment and internal sources. Its multiple interacting components produce one or many self-organized equilibrium points, whose form and stability depend on the system's constraints. Growth is conceived of as an iterative process, which means that the present level of development depends critically on the previous level of development (van Geert 1994) and variation is not seen as "noise" but as an inherent property of a changing system:

The theory radically rejects the automatic retreat to the error hypothesis and claims that variability bears important information about the nature of the developmental

process. Dynamic systems theory stresses the importance of the context in which the behavior is displayed. Development takes place in real time and is considered highly context dependent. Therefore, it can be compared with an evolutionary process, which is also mindless and opportunistic. Thelen and Smith (1994) agree with the classical Darwinian emphasis on variability as the source of new forms. They state: "we believe that in development, as in evolution, change consists of successive make-do solutions that work, given abilities, goals and history of the organisms at the time."(pp. 144) Variability is considered to be the result of the systems' flexibility and adaptability to the environment. From a dynamic systems angle, variability has been viewed as both the source of development and the indicator of a specific moment in the developmental process, namely in the presence of a developmental transition. (Van Dijk 2003, 129)

Intrinsic in this view is the idea that individual developmental paths, each with all its variation, may be quite different from one another, even though in a 'grand sweep' view these developmental paths are quite similar. As far as our own case study is concerned, we would expect to find less variation when the data of the two subjects are averaged, quite a bit of variation within some aspects of a subject's writing at different moments of time, and a great deal of variation between the two subjects.

While the statistics of the 'true score' approach are well developed and offer researchers the comfort of a clear demarcations what is 'significant' and what is not (or so it seems), methods to look at variation as a source of information from a DST perspective are only beginning to be developed (see van Dijk & van Geert 2002 for several interesting techniques that are also accessible for the less-statistically sophisticated individual). The differences in techniques reflect also a different way of looking at developmental data. While the traditional approach is based on mathematical principles of chance and variation in order to test hypotheses, the DST approach is much more geared towards visualization to see developments and discover the underlying mechanisms of development. Also, in our own case study, we will look at where variation takes place and what it may tell us about the developmental process.

Variation in L2 systems

Related to the discussion on variation and change is the question of what development in a system actually is. We tend to think about development as goal oriented, but it is quite unlikely that the system 'knows' where it is heading, since it only reacts to external forces. According to Thelen & Smith, "all the facts possible about the architecture of the end-state won't tell you how it got there (36)." And they later add: "There is no design, no blueprint, no pre-given specifications for the species to emerge. There is no end state, only context specific adaptations (144)." This contrasts rather sharply with ideas on 'the end state' as they have emerged in Universal Grammar. From that perspective there is a goal and accordingly an end point. Or, to use Larsen Freeman's words: "Indeed, the very phrase 'target language' is misleading because there is no endpoint to which the acquisition can be directed. The target is always moving (151).

Also from a language-teaching point of view, we tend to think about acquisition as something that has an end-point". For example, in teaching Asian students the use of the English article system, we consider the acquisition process done when they have mastered the article system as evidenced by errorless production. In reality this is of course not what happens. The system does not stop developing because we no longer teach the details of article use. For some time the usage may be stable due to the attention paid to it, but gradually the more peripheral aspects may be lost due to non-use and a more limited set of rules will remain: the system sets in a new equilibrium.

Again this will not be the end state. When the learner for some reason becomes aware that her article use is causing confusion again, she may focus on it and reactivate the rules learned earlier on. 'We must consider the possibility that the end-state of development is also not "stable", but a state that is "dynamically stable" in the sense that the produced language still shows a considerably variable range dependent on situational factors (Van Dijk 2003, 138-139).

An L2 example could be the study of the acquisition of grammatical gender in L2- French. The knowledge of the gender system in French is part of the complex system and an individual's knowledge of that system, and accordingly the system itself, is constantly changing due to internal restructuring and external factors, such as input or an awareness of the need to change the system because some communicative needs cannot be fulfilled. When that happens the learner will try out new hypotheses, based on internal and external

information, and accordingly, the output will show variability. Different learners will develop their systems in different ways, which leads to variation among learners in addition to the variation within learners caused by the trying out of various hypotheses.

Going back to the two perspectives on variation mentioned earlier, we can look at this variation in different ways. We can simply take the most frequent patterns of gender use of individuals and compare a number of similar learners to see what they have in common, and take the shared part of the inter- and intra-individual variation and call that the developmental trend in this group of learners. This means disregarding all the variation, but the bonus is a more or less smooth trend. When we take the other perspective, the picture becomes radically different. Rather than taking what is shared, we focus on what individuals do and try to see what hypotheses are tested on the basis of what the learners say or write. The variation is not a problem blurring our view on the larger trend, but it tells us something about how the L2-system of this learner is developing, what hypotheses are tried out and which ones emerge as the variation decreases again. So the variation is both a signal of the system moving to a new equilibrium and a source for development, because without testing different new hypotheses, which leads to variation in output, the system cannot develop.

Another part of the discussion on variation is what the categories are that show variation. As linguists we tend to think in terms of the descriptive linguistic categories such as the gender system, but this may be a step too far. Even though the existence of such categories in language processing have been proven sufficiently, it is less clear whether all instances we can find in the developmental data can and should be categories using these labels. For example, is the distinction between for instance nouns and verbs in early language development justified? On the basis of her data on child language development van Dijk (2003) argues for using fuzzy logic, which will allow for more ambiguity in the coding of data than is normally done. The categories used in linguistic analyses may not (yet) have that status in the learner's system. An article may in fact be treated like an adjective or the other way around making the distinction between the two unclear. As van Dijk shows, allowing for additional 'in-between' categories does not make the data less clear (134).

An L2 case study

While there are quite some longitudinal data on L2 development in children and adults, no research has been done so far on variation in SLA from a DST perspective. We expect this

approach to emerge as a serious alternative to traditional views on variation in SLA and we will here show the results of a pilot study on two students' writing sample. The questions are whether there is indeed as much variation as predicted by DST and whether this variation can tell us something about the developmental stages of these students.

We have gathered data on about sixty students, but here we present only some initial findings. Two writers were arbitrarily selected members of a third-year HAVO class. The group of students was asked to write for ten minutes at the beginning of each English class (three times a week) for six weeks in a row. The students were all given a notebook by the teacher, who would hand out and collect the notebooks during class. Because of tests and school holidays, the subjects had each 10 entries in their notebooks. The assignment was left completely open. The students were allowed to write about anything they liked, for example about events they had experienced or observed. The teacher had also given the students the instruction to write words in Dutch if they did not know the English equivalent. The two subjects we will discuss here wrote mostly about personal experience and events. The teacher would comment once a week on the content of the writings, but she would not correct or comment upon the language as such in any form these first six weeks. The goal was to see if any "self-directed" development would take place. Our assumption was that in six weeks time the sole practice of writing ten minutes a session would allow fluency to development somewhat: one learns by doing.

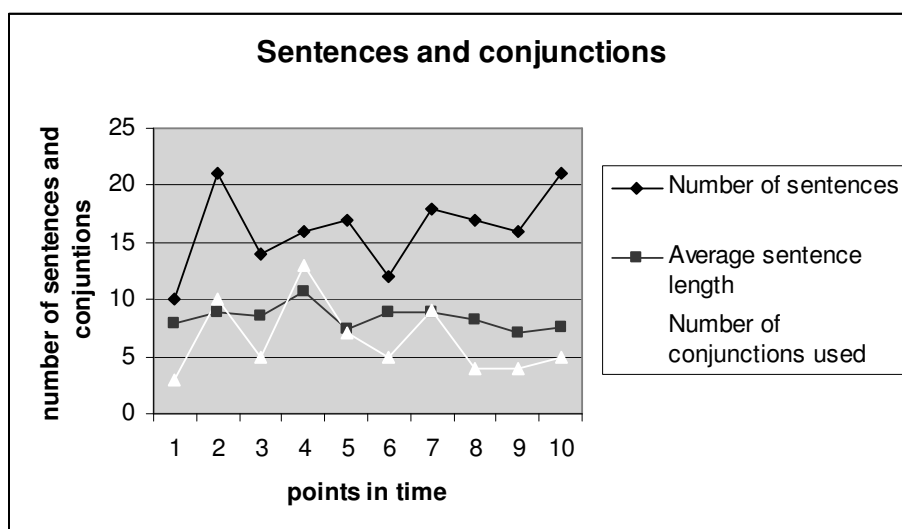
Since this was an explorative study and we did not know which particular sub-system of these individual students at this particular stage of their development might be subject to great variation and which ones had reached a somewhat stable state, we looked at a variety of features of the writing that would indicate change or development: type/token ratio, number of words written per entry, average sentence length per entry, the number of conjunctions used to connect clauses, the percentage of spelling errors, the number of Dutch or non-English words used in the text, the use of tenses and correct versus incorrect grammar usage, such as in the use of the word order, tenses, determiners, and prepositions. Development is defined as greater fluency (more words per entry, fewer Dutch words, longer sentences, and more complexity) and/or accuracy (fewer misspellings, fewer grammatical errors, and so on).

The data were looked at with the following questions in mind: (1) Is there variation and if so, does the degree of variation for a certain aspect level off at some point to show that for that aspect an attractor state has been reached? (2) Do the data tell us something about

hypotheses tried out by the writers? (3) Do averages between two subjects and the individual data show different pictures? And (4) do the two individuals show individual differences?

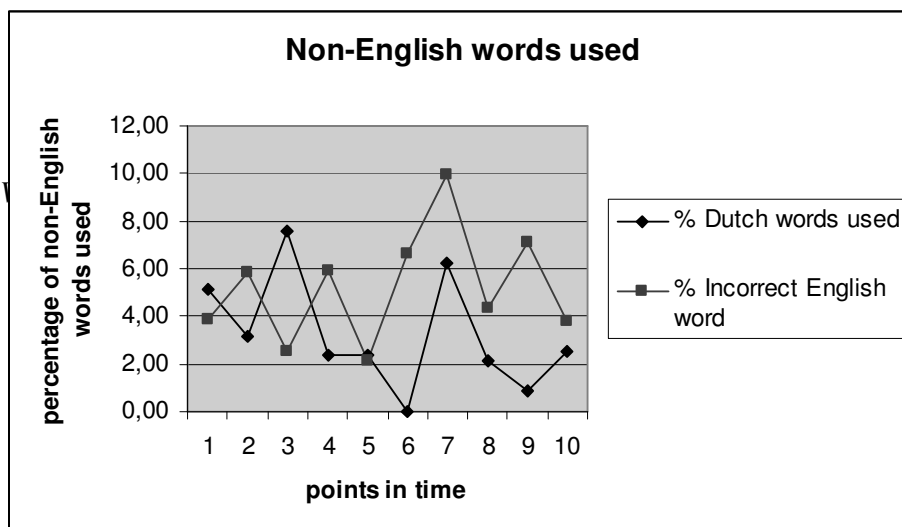
The data

Here we will give only one subject's data (MB) as an extended example because the other subject's data (ED) showed very much the same patterns. The original text upon which the data discussed below are based is in the appendix. A quick look at different aspects shows a great deal of variation in different aspects: the number of sentences per entry, the average length of the sentences, and the number of conjunctions (coordinate or subordinate) that connect clauses. Rather than showing some steady development, we see MB's better writing with longer and more complex sentences taking place in week 4 when she tells us about an exciting event for her. In most entries she states that she does not know what to write. It seems as if her writing becomes less complex when she admits she does not know what to write (entry 3 and 7), feels bored with writing (entry 10) or feels down about something (in entry 6 she seems down about her English test).

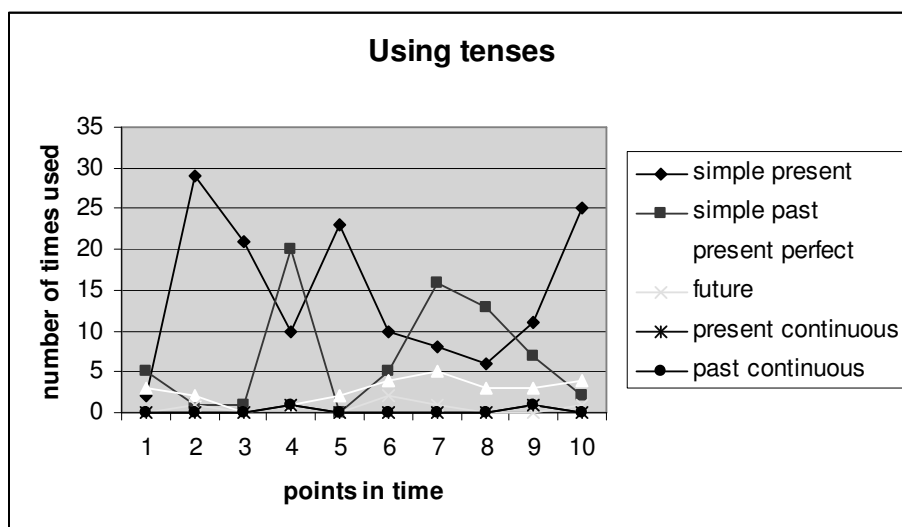


Even though MB's writing seems to be full of non-English words (either Dutch words or incorrect English ones), the total percentage of such words is never more than 10%. But as the chart below shows, there is again a great deal of variation, indicating that the student is

still struggling with her vocabulary, especially when specialized topics such as gymnastics are dealt with. However, the data do not indicate any sign of stabilization.

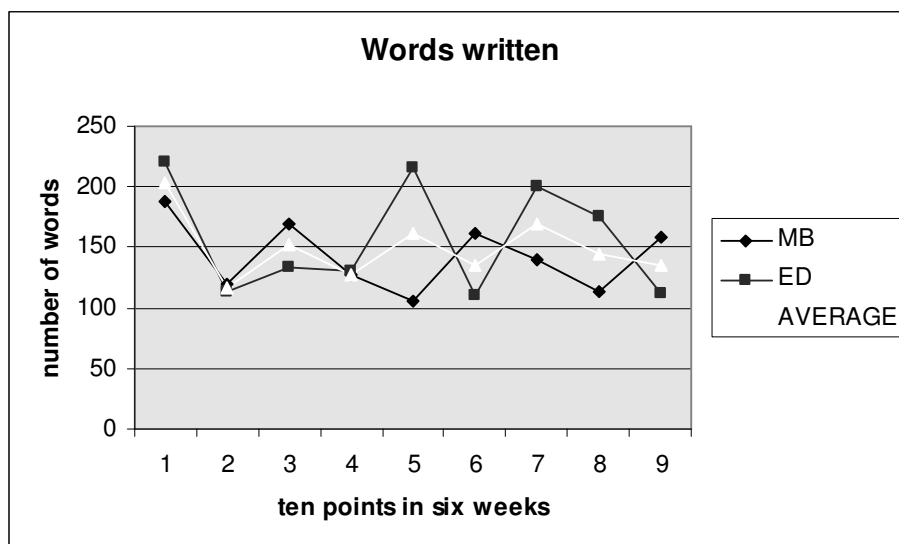


When we look at MB's use of tenses, we can clearly see that she uses mainly the simple present and the simple past tense and that she is beginning to use the present perfect tense. When we look at the raw data, we discover that this form is appearing in rather arbitrary circumstances. She uses the present perfect in three consecutive weeks: In week 6 a use that would occur in Dutch also and is acceptable in English in this case (*We've had a test week last week*), in week 7 a use that would not occur in Dutch and is not acceptable in English (*Now I've been 7th of the north of Holland*), but here we could argue here that MB's category is not the same as ours, a possibility pointed out by van Dijk (2003, 134). MB probably uses "have been" as some equivalent of Dutch "ben geworden". In week 8, we see a use of the present perfect that would be correct in Dutch, but not in English (*We have slept with 8 people in one tent*).



We have looked at many different aspects of MB's writing, such as number of errors in spelling, correct/incorrect use of tenses, average word length, and so on, but in all cases we see a great deal of variation without any indication that the variation is leveling off at any particular point. Also, no clear development as expressed in fewer errors, more complex sentences and so on could be detected.

Even though the circumstances were similar, the subjects (MB and ED) showed quite a bit of intra-individual variation. One example is in the total number of words that they wrote within 10 minutes. When we compare MB's and ED's data to their averages, we see that averaging data does have a leveling effect on the data, blocking out the intra and inter-individual variation. ED writes more on the whole. MB shows less fluctuation than ED but also writes less on the whole. The data also suggests that the setting in class plays no role.



Discussion

As expected we see a great deal of inter and intra-variation and we also see some signs of initial hypothesis forming. However, we do not see any leveling off of variation or any clear indication of development. The lack of development could have had several causes. The writers received no feed back and may have received too little usable L2 input to improve on their own. Another reason could be the lack of "self-directedness." Apparently, with the open-

ended assignment that would not be graded, MB was seemingly not very interested in improving her writing, be it at the content or form level. Another detail that seems worth mentioning is that the level of her writing (more and longer, more complex sentences) improved when she had an interesting event to report on. When she seemed bored, tired or down, the level of her writing declined. This is very much in line with DST. When the system is stable, external influences will not have as much effect as when the system is still trying to find its equilibrium (cf the analogy with learning to walk). However, at this point, we believe that the most likely reason for the clear lack of development and leveling off is the fact that a time period of six weeks is simply too brief for this type of skill to develop to any great degree.

Conclusion

In this paper we have made a case for looking at SLA through a DST perspective and focused on the role of variation. Rather than averaging out inter and intra individual variation to show general tendencies, we have argued we can also look at variation per se to look at an individual's process of development. In this pilot case study, we looked at two individuals' free writing (without explicit instruction or feedback) during a six-week period. As expected, these beginning L2 writers showed a great degree of inter and intra individual variation, seemingly related to the topic written about or the mood of the subject. Unfortunately we were not able to discern any clear leveling off of variation indicating some development in any of the aspects investigated. In the near future we will look at "the grand sweep of things" by analyzing the data of all the other subjects in the group, but we expect a similar pattern of variation without stabilization. Further research will have to show whether subjects show signs of development during a longer period of free writing or whether some more external force in the form of a more explicit task assignment, instruction or feedback is needed to bring about change.

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Appendix: Original text written by MB, third-year, female Havo student

3h-MB-1

9 Maart

My vacation

Most of the time I was at home. Saturday I've had (turnwedstrijden). I wasn't very good but I've had it very nice.

(Donderdag) was I in Vlagwedde with a couple of friends. I'd swam there. It was very nice. The rest of the days I was in my pyjama or I watch the tv. That isn't much for a vacation. But I've had a (rustige) vacation, without much homework to do.

3h-MB-2

12 maart 2004

Now you know what I did in my vacation, but you don't know anything about myself.

I am M B and I am 15 years old and I live in B.
I am born in Winschoten in the hospital.

My hobby's are: gymnastic and I (turn). I (turn) almost 6 hours in a week. I do gymnastic 1 hour in a week.

I have a brother and sister. My brother is 10 years old en he does groep 6. My sister is 12 years old and sits also as my on this school.

Every day I go on my bike to school. It's almost 7 (km) from B. I don't mind that it's so far. I like it.

If I want to shop I'll go to W because in B aren't many shops. We only have a C1000 and a chemist shop. Not exactly a (winkelcentrum).

I have a few good friends. Most of them live also in B but my best friend lives in Heiligerlee. We've been friends since last year. I know here from my class.

That's myself!

3h-MB-3

16 maart 2004

Now you know what I did in my vacation and you know how I am. But now I don't know what to write.

My sport is gymnastic. We have four (toestellen). These are (brug, sprong, vloer en balk). The most lovely about my sport is that it's always very nice. The people were I sport with are nice, and my teacher too.

Tomorrow we have a (basketball toernooi) for all the 3th classes. My team has 6 people. They are Nadine, Nancy, Robbert, Bert, Monique and myself. It's a nice group to play with. I think we've most of the time fun, and ofcours I hope it.

The time is upp. I must stop now.

3h-MB-4

19 Maart 2004

Yesterday we didn't have school, because the teachers had (rapportenvergaderingen.)

I went with a couple of friends to Groningen. We were there for shopping.

We went by train. We didn't have a clue how the ("ticketapparaat") worked. So we looked by a men who did it before us. Than we know how to use it. But we had to many (kleingeld) so all my friends were looking for it. Now we had the tickets but we missed the train, and we had to wait for the next train.

When we were in Groningen we went first to the Mc Donalds because it was 12.00 hour. That was very nice because we saw a few people from school. A few of them were Esther, Ali and some other people; you don't know who they are.

I came Esther a couple of times (tegen). We haven't spoke to eachother because we see each other today.

Now I'll have to stop becaus the time is up.

Bey bey

M

3h-MB-5

24 Maart 2004

Tomorrow we have a testweek on school. Then we have two test on a day. That do we have five days long.

All the test mast you learn. Only English and Dutsh we don't have to learn, because they are reading tests.

My sister Aniek has broken her (teen) (tone). She was fallen with baseball (toernooi) (math). She don't have gips but she has a (spalk). Only she walks (wankel).

Because my testweek I don't have many homework. That's nice. But I have to learn for my tests and that is very sad.

Every body is this week a few hours free. And we don't. That isn't nice cause I have to cycle along home. That's very boring.

Kiss
M

3h-MB-6

2 April 2004

We've had a test week last week. Every day we had two tests. Most of them were easly. But my test English was difficult.

I really don't know what to tell/write at the moment. I didn't do much the last week.

Saturday will my friend have a turn competition. These are the finals. I wasn't good enough. Thats why I'm gonne look to it. I really don't fancy to go but I've promise it to my friend.

Now I haven't told much but I've had to stop now because the time is up.

Goodbey M

3h-MB-7

6 April 2004

I don't know what to tell. But I shall think about it.

Saturday a had a turncompetision. I thought I was looking for my friends, but there were any (uitvallers). That's the reason that I (meedeed) saturday.

Without a warming up I had to do my balk (oefening). It wasn't very good but I had a 8.4 on it. After my balk came my (vloer, sprong) and my (brug). Everything weren't very well but after my (sprong) I was thirth. I was fallen of the (brug). Now I've been 7th of the north of Holland.

I really don't know what to tell now because I didn't do much.

Oh, Saturday evening I was by a friend of my. We've looked Idols. She was with her father, brother, sister and grandparent and onkel celebrate her onkel's birthday. And I was by (with) it. It was very nice.

Now times up

Bye bye M

3h-MB-8

23 april 2004

I've had a schooltrip. We went to the Veluwe with a bus.

When we came there, we had to (survival). Some of the (opdrachten) were very boring and some them were nice.

At night it was very cold. We had a few (truien) on. Even then it was cold. I think it was freezing.

We may not go to the boys and the boys may not go to the gilrs. But we had a few boys by us in the tent. This was very nice.

We have slepted with 8 people in one tent. Most of these people are my friends.

The second day I was very angry because I had a fight with two of my friends. That wasn't very nice on a schooltrip.

Now the time is up. So I have to stop.

Kisses M

3h-MB-9

27 april 2004

Yesterday was my sister's birthday. She is now 13 years old.

From my parents she had a mobile phone. I gave her a (fotolijstje) and some penns.

We sat outside yesterday because the wetter was very nice. The sun was shining.

Today is Jasper a little crazy. He is the hole time saying that I have a nice smile and nice eyes. But he don't mean that.

Saturday I've had a math from my club. I wasn't the best but I've laughing. That was nice too. I've to stop now. The time is up. That's good cause I don't know what to tell now.

Kisses

M

3h-MB-10

28 april 2004

Today it is our last day we have befor the (schoolbezetting) is and the vacation.

Yesterday it was beautiful wetter. After school I've the hole day walked in my bikini. My homework have I done in my garden. That was nice.

Tomorrow is the last schoolday for the examen students. They (organisieren) a school (bezetting). I don't think I'm going too it. Most of the time it is boring.

This is the last time we must write. I'ts great! Because I don't know what to write. Maybe I go by skeelers to school tomorrow with my friends. I skeeler pretty much. That's the reason that we to school skeeleren. But I have to wake up early tomorrow. It isn't as fast as by bike. But I will see what I'm going to do.

This is my last write. The time is up so I have to stop.

Bye bye M