

Meaning-making online: Discourse and CMC in a language learning community

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While the technological side of online education attracts much attention, we should also consider how learners make meaning when they are communicating via computers. This paper reports on a study of the discourse of an online community of English Language learners and tutors who use synchronous text-based CMC (SCMC). SCMC differs from more traditional forms of spoken and written discourse in a number of ways. For example, the verbal and visual cues of spoken discourse are lacking in the SCMC equivalent, which yet takes place in real time as a written conversation.

The paper applies the discourse concepts of cohesion and coherence to address the following questions: How do participants make sense of each other in a text-based virtual environment? How do specific social and technological factors combine to shape the discourse? The paper concludes with comments on the way a study of the discourse of CMC can lead to a re-evaluation of coherence in discourse.

Keywords computer-mediated communication; discourse analysis; language learning

1. Introduction

This paper is a study of coherence in computer-mediated discourse. The discourse type in question is synchronous, text-based computer-mediated communication, henceforth referred to as SCMC. The distinctive characteristics of SCMC can be summarised thus:

- SCMC is text-based human-human communication via computers
- SCMC discourse happens in real time, i.e. synchronously
- turns in most SCMC cannot be seen by other participants until they have been sent
- participants can scroll back and forth to re-read previously sent stretches of discourse text.

The participants' sense is that SCMC is in some way a paradox, a hybrid of speech and writing, or that it bridges a divide between the two. This paper takes as its starting point an analysis of SCMC discourse text as 'spoken-like', and draws on models of coherence and cohesion from spoken discourse analysis. Then discussion extends to the effect of technological and social factors on SCMC interaction.

Data in this paper is from the SCMC chat forum of *Webheads*, an informal community of learners and tutors of English with an interest in online communication who meet in various places on the internet. This paper has most direct relevance to language pedagogy, but has a bearing on any informal collaborative teaching and learning which makes use of SCMC.

Coherence is central to the study of discourse. Cook defines coherence as '... the property of being unified and meaningful'[1], and discourse analysis as 'the search for the answer to the problem of what gives stretches of language unity and meaning' [2]. This is to say, discourse analysis is the search for coherence. In whatever mode or medium, and whether by the participants or by analysts, this is an interpretive process. We appeal to linguistic form (lexis and syntax) and to the surface links of discourse text (cohesion), in this process. However, it is participants who ultimately accord meaning and unity to the text. Coherence is reflected most obviously in cohesive links in discourse text and in sequencing. Parts

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1 two and three of this paper discuss these facets of coherence. It also depends on a background knowledge
 2 of SCMC discourse within the virtual environment which is the discourse setting. In part four we discuss
 3 background knowledge of SCMC discourse with reference to the concept of schema.

4 5 **2. Cohesion in SCMC** 6

7 *Cohesion* refers to the way the surface text of discourse – the words we hear or see – are mutually con-
 8 nected. The term *cohesion* is used here in the sense of non-structural text-forming relations. This section
 9 is a brief illustrative summary and discussion of the role of cohesion in the wider question of how coher-
 10 ence is ascribed in SCMC discourse. Cohesion is primarily a feature of the text, and as such is primarily
 11 a reflection of coherence. This is not to say it is not important, and that cohesion does not play a coher-
 12 ence-building role as the text unfolds. This is particularly the case with SCMC discourse, where the
 13 textual record of the real-time conversation is immediately available for participants and analysts alike.

14 Halliday and Hasan's *Cohesion in English* is seen by many as the standard work on cohesion in dis-
 15 course [3]. Halliday and Hasan describe in some detail five aspects of cohesion: reference, substitution,
 16 ellipsis, conjunction and lexical relation, which seem to be universal across modes of use in English.
 17 Below we examine an illustrative attested example of just one of these – reference – from one particular
 18 stretch of SCMC interaction. We then turn to a feature of cohesion from the same interaction which is
 19 particularly characteristic of SCMC.

20 Items which have the property of reference are described by Halliday and Hasan as making reference
 21 to something else for their interpretation, rather than being interpreted semantically in their own right [4].
 22 In this example, reference belongs to what Halliday and Hasan call the 'person' system; this comprises
 23 personal pronouns, possessive determiners (adjectives) and possessive pronouns. The middle turn in the
 24 example below has been removed as it is not immediately relevant:

25
26 Extract 1

27 Ying-Lan: Maggi, What do you do in the snow day?

28
29 Maggi: shovel it
30

31 Here, *it* in the second turn refers to *snow* in the first '... by specifying its role or function in the situation'
 32 [5]. In this case the situation is this particular Webheads SCMC conversational episode. The reference is
 33 anaphoric; that is *it* (the reference item) refers to preceding text. Reference is described by Halliday and
 34 Hasan as a semantic relation, in that it holds between meanings. The referent is thus considered as a
 35 signal for meaning, pointing to the meaning which in this case (*snow*) is already available.

36 Some cohesive devices are highly characteristic of SCMC discourse. Here we discuss the cohesive
 37 device of three dots in text (...), suspension dots. There are a number of general features of suspension
 38 dots in SCMC discourse. They can be used as ellipsis dots; that is, they indicate the omission of unneces-
 39 sary text. The first time they are used by Maggi here is for ellipsis:

40
41 Extract 2

42 Maggi: Where else silly...online...
43

44 They can also represent what would be a pause in spoken discourse:

45
46 Extract 3

47 Maggi: I'll be here too...so this is not the last time
48

49 Thirdly, they can indicate a 'trailing away' at the end of a turn or a sentence:

50
51 Extract 4
52

1 a Ying-Lan: Vance is on his Vacation... Does he go back to
2 USA with his family?

3
4 b Maggi: like I feel...
5

6 And finally they have a conjunction role. At the end of a turn they might appear as a 'trailing away'
7 device, only to recur at the beginning of a subsequent turn:

8
9 Extract 5

10 1 Maggi: there is still so much to do....
11 2 MichaelC: I wasn't invited anywhere by anyone!
12 3 Ying-Lan: That's wonderful to have a special Christmas in
13 Norway.
14 4 Maggi:but i AM NOT MAKING MYSELF CRAZY
15

16 The text in turn 1 is linked to the text in turn 4 by the suspension dots at the end of turn 1 and at the be-
17 ginning of turn 4. This use of suspension dots can be seen as a device for the breaking up of long turns.
18 That is, rather than posting a long turn which might be ignored by others, participants frequently send the
19 message in short bursts linked by suspension dots. It could be seen as an attempt to inhibit others from
20 taking their turn; in some respects it is a floor-holding device, but turn-taking cannot be prevented like
21 this in SCMC. It may be that use is made of suspension dots in part to increase interactivity (and hence
22 enjoyment) in the SCMC medium.

23 It should be noted that coherence, even coherence reflected in cohesion, is always dependent upon
24 background knowledge of some sort. Even with the most straightforward anaphoric referential relations,
25 participants need at least to have an implicit knowledge of the cohesive nature of, for example, 'John ...
26 he'. And we cannot rely on a description of cohesive relations alone to determine what makes a written
27 conversation coherent for its participants. In the following sections of this paper sequential coherence,
28 and the representation of background knowledge are discussed with reference to SCMC discourse. It is
29 argued that these perspectives on coherence require an appeal not only to the tangible textual record as it
30 unfolds, but to other types of knowledge, perhaps of the system effects on the discourse (section three
31 below), and of the conventional behaviour of the particular community within which the interaction takes
32 place (section four).
33

34 3. Shaping the discourse: the influence of technological factors

35
36 The most obvious system influence on the discourse of SCMC is reduced coordination of turn transfer
37 which results in disrupted turn adjacency. This is where turns appear out of place in the discourse text as
38 in the example below, primarily because turns cannot be read by other participants until they are sent,
39 and because the visual and auditory cues of the turn taking system of spoken conversation are missing in
40 written conversation.
41

42 Extract 6

43 MichaelC: Good evening Ying. How are things?
44 Ying-Lan: Not so good.
45 Ying-Lan: I took a test this morning.
46 MichaelC: What's wrong?
47

48 A distinction is made here between disrupted turn adjacency and the existence of multiple threads of
49 conversation. The latter feature, called *interleaved exchanges* by Herring [6], is the property in SCMC
50 for two or more unrelated threads of conversation to be running together. This phenomenon, closely
51 associated with the development of the conversational floor, is a feature of multi-party SCMC.
52

Here is a brief example of multiple threads:

Extract 7

- 1 Maggi: peek-a-boo!
 2 MichaelC: In answer to your q Ying - yes I think Vance is
 3 visiting family in the US.
 4 Maggi: he said so in his last email to the group.
 5 MichaelC: Ying - you're avatar looks very tired!
 6 Ying-Lan: It is important to be our family in Y2K New Year
 7 coming.
 8 Maggi: like I feel...
 9 MichaelC: I feel quite bonny!
 10 Maggi: I was invited to Zurich, but I think I will stay
 11 home.
 12 Ying-Lan: Yes, I am tired.
 13 MichaelC: I guess you got up early to study for your test
 14 Ying?

Turns 1, 4, 6, 7, 9 and 10 belong to one thread, while turns 2, 3, 5 and 8 belong to a second. Multiple threads are discussed by this author [7], where they are considered as the surface realisation of conversational floors.

Recognition of the knowledge participants have of the system-related effects on turn-taking and coordination of transfer in SCMC has certain implications for its analysis. It should be borne in mind that when SCMC interaction originally takes place, participants can see the text unfolding on their screens. They are also able to scroll back up the screen to re-read previous parts of the interaction. These properties raise interesting questions about the relationship of text to discourse. There is a distinction commonly made between discourse (a process) and text (the product of the process). In the case of spoken discourse analysis, the interaction is usually recorded and transcribed prior to analysis, effectively separating the text from the context. Regarding SCMC, participants have immediate access to the linguistic product of the discourse process. They can read the text (the product) as the interaction (the process) unfolds. Being able to read backwards and forwards in text renders SCMC discourse more written- than spoken-like in this respect. SCMC discourse thus differs in an important way from spoken conversation. If participants themselves view the text as 'product', this in effect frees the analyst from the obligation to gather a sense of the ongoing or unfolding nature of the discourse for the purposes of analysis. In this respect, analysis of SCMC discourse can take into account the following co-text in a way prohibited to the analyst of a transcript of spoken conversation.

4. Making meaning: Schematic knowledge

A text does not necessarily have to be cohesive to be coherent. Coherence is accorded to discourse by participants who draw on various kinds of knowledge. This may well be, of course, implicit knowledge of cohesive relations, or of turn-taking patterns and disturbed adjacency in SCMC. In this final section we pay particular attention to areas schematic knowledge. Put simply, schematic knowledge is the organised background knowledge which participants draw on when making sense of text, that is, in their effort to render it coherent. Two areas of schematic knowledge are pertinent here: formal knowledge and sociocultural knowledge.

Formal knowledge in SCMC includes a knowledge of what a participant would expect to find when joining any SCMC interaction. This would be the general characteristic discourse patterns of SCMC: all SCMC discourse has the propensity to involve multiple threads of conversation and disrupted turn adjacency, for example. This knowledge would also be of interface and navigational tools, and of how to write and send turns. In more established literacy traditions it is taken for granted that production will involve writing with some implement or other. In the case of SCMC discourse, the very act of being able

1 to be a participant requires a certain amount of technical ability. Formal knowledge in SCMC encom-
2 passes discourse and technological knowledge.

3 Another side of schematic knowledge is *sociocultural knowledge*. Interaction can differ widely be-
4 tween virtual communities. Sociocultural knowledge is the knowledge of how to interact appropriately in
5 a particular community; a knowledge and ability for use of the sociocultural rules of a community.

6 In this example, the participants appeal to the formal (technological) and sociocultural aspects of their
7 schematic knowledge.

8
9 Extract 8

10 BJB asks, "welcome back, Roslyn...better connection now?"

11 RoslynT says, "o"

12
13 RoslynT's turn is coherent for the participants and for the analyst. In the next turn we find:

14
15 Extract 9

16 BJB . o O (uh, oh...is that o as in no?)

17
18 BJB's turn, sent as a 'think' command, is an explicit attempt to make sense of RoslynT's turn 'o', thus to
19 render it coherent. She creates coherence by appealing to knowledge that there are technological difficul-
20 ties associated with participating in SCMC discourse. The sociocultural element is evident in the fact that
21 RoslynT's difficulties with communication attract BJB's attention and she is willing to assist.

22 23 5. Conclusion

24 A focus on SCMC is illuminating as it both necessitates a re-evaluation of the connection between cohe-
25 sion and coherence, and highlights the fundamentally interpretive nature of the search for coherence.

26 For SCMC is largely uncohesive in conventional terms: it lacks *sequential coherence*. This lack is most
27 obvious when we consider two features of SCMC: disrupted turn adjacency and the development of
28 multiple threads of conversation. Disrupted turn adjacency refers to the tendency for turns to appear out
29 of their expected serial order. Multiple threads, the surface evidence of the existence of a multiple con-
30 versational floor, occur when more than one conversation is happening at a time within the same space
31 on-screen.

32
33 Yet the point is also made that successful participants know that the discourse does not have to be
34 cohesive to be coherent. They overcome the ambiguities of SCMC discourse text – disrupted turn adja-
35 cency and the preponderance of multiple threads – by appealing to types of background, or schematic,
36 knowledge when ascribing meaning to the discourse text.

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39
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