

# Computer Writing and Research Lab

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## *Describing Assemblages: Genre Sets, Systems, Repertoires, and Ecologies*

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*Abstract: Genre theorists agree that genres work together in assemblages. But what is the nature of these assemblages? In this paper I describe four frameworks that have been used to describe assemblages of genres: genre sets, genre systems, genre repertoires, and genre ecologies. At first glance, they seem to be interchangeable, but there are definite and sometimes quite deep differences among them. I compare and contrast these frameworks and suggest when each might be most useful.*

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GENRE IS A WAY OF TALKING about how people regularly interpret and use texts. I mean “texts” broadly speaking: we talk about genres of literature, music, architecture, speech, and even computer interfaces. Computer interfaces and related technological artifacts can be and have been productively examined in terms of genre.<sup>1</sup> A genre analysis of a particular technological artifact can be useful for understanding how the artifact is typically interpreted and used, but any given artifact is typically used in concert with others. That is, genres are used in assemblages or complexes; few if any technological activities use just one, and most use great clouds of them.

How can these assemblages be discussed, examined, and theorized? In this white paper, I examine four frameworks that have been used to describe assemblages of genres: genre sets, genre systems, genre repertoires, and genre ecologies. At first glance, they seem to be interchangeable, but there are definite and sometimes quite deep differences among them. I compare and contrast these frameworks and suggest when each might be most useful.

To help with this comparison, I examine the frameworks along five axes:

<sup>1</sup> Antunes, P. and Costa, C. J. (2003). From genre analysis to the design of meetingware. In *Proceedings of the 2003 international ACM SIGGROUP conference on Supporting group work*, pages 302-310. ACM Press; Orlikowski, W. J. and Yates, J. (1994). Genre repertoire: The structuring of communicative practices in organizations. *Administrative Science Quarterly*, 39: 541-574; Spinuzzi, C. (2003). *Tracing genres through organizations: A sociocultural approach to information design*. MIT Press, Cambridge, MA; Williams, A. (2003). Examining the use case as genre in software development and documentation. In *Proceedings of the 21st annual international conference on Documentation*, pages 12-19. ACM Press; Yates, J. and Orlikowski, W. (2002). Genre systems: Structuring interaction through communicative norms. *Journal of Business Communication*, 39(1):13-35; Zachry, M. (2000). The ecology of an online education site in professional communication. In Malkinson, T. J., editor, *SIGDOC 2000 Conference Proceedings*, pages 433-442. ACM, Inc., New York; Zachry, M. (2001). Constructing usable documentation: A study of communicative practices and the early uses of mainframe computing in industry. *Journal of Technical Writing and Communication*, 31(1):61-76.

- *Perspective*: From whose viewpoint does the framework afford analysis? That is, what determines the range of genres under consideration? Frameworks can take the perspective of individuals, communities, or activities.
- *Model of action*: How do the genres in a framework affect the users? How are they used and how do they change their activities through their use? These frameworks tend to model action as either communication or mediation.
- *Agency*: Who acts in each framework? To whom or what can we attribute the work being done? These frameworks deal with agency asymmetrically (with an individual in control of genres) or symmetrically (with individuals and genres mutually controlling, guiding, and mediating each other).
- *Relationship between genres*: In each framework, are genres related sequentially (each leading into the next), or do they overlap (with multiple genres being brought to bear simultaneously on a problem)?
- *Foregrounded genres*: Which genres are particularly examined in a framework, and which are given less scrutiny? Genres range from entirely official (such as required and structured forms) to entirely unofficial (such as aides memoire or scribbled notes).

### *Genre Sets*

Amy Devitt's 1991 essay "Intertextuality in tax accounting: Generic, referential, and functional" is the canonical text on genre sets. In her examination of how accountants get things done, Devitt posits that texts form networks of interaction for the accountants. Each text connects to the previous text in a sequential chain of actions. "In examining the genre set of the community, we are examining the community's situations, its recurring activities and relationships." And she adds, "This genre set not only reflects the profession's situations; it may also help to define and stabilize those situations."<sup>2</sup> Her focus, in fact, tends to be on that sequential and stabilizing work,<sup>3</sup> and that leads her to examine the official (disciplinarily developed, stabilized, and regulated) texts that do the most to perform this work. Although she counsels us to "examine the role of all texts and their interactions in a community,"<sup>4</sup> she only examines the "products" of the work -- memos, correspondence, tax provision reviews -- not unofficial genres such as transitory annotations, notes, aides memoire, etc.

<sup>2</sup> Devitt, A. J. (1991). Intertextuality in tax accounting: Generic, referential, and functional. In Bazerman, C. and Paradis, J. G., editors, *Textual dynamics of the professions: Historical and contemporary studies of writing in professional communities*, page 340. University of Wisconsin Press, Madison, WI.

<sup>3</sup> Devitt (1991) page 341.

<sup>4</sup> Devitt (1991) page 354, author's emphasis.

These official genres bound and enable professions, in Devitt's account, but they appear to serve serial and strictly communicative functions, not self-mediational ones. Remember when you were doing math in high school and the teacher told you not just to write your answer, but to "show your work"? Genre sets don't show the work; they don't expose the unofficial genres that play such a large part in distributing cognition. They are asymmetrical in Latour's sense. They foreground the agency and the work of individuals.

### *Genre Systems*

Genre sets are also, as Charles Bazerman points out, focused on individual perspectives. In "Systems of genre and the enactment of social intentions,"<sup>5</sup> he seeks to extend the notion of genre sets to communitarian perspectives by talking about genre systems. "These are interrelated genres that interact with each other in specific settings. Only a limited range of genres may appropriately follow upon one another in particular settings, because the success conditions of the actions of each require various states of affairs to exist."<sup>6</sup> Like genre sets, then, genre systems are made up of sequences of genres that hand the baton of communication onward -- "textual pathways," to use Russell & Yañez's synonym.<sup>7</sup> Each genre is required in order for the next one to be produced and used. That, of course, once again implies official genres and focuses away from the informal, unofficial assemblages of genres that we often bring to bear on our work. Unlike genre sets, genre systems involve "the full set of genres that instantiate the participation of all the parties"<sup>10</sup> -- but that "full set" appears not to be so full when we consider that unofficial genres are squeezed out.

JoAnne Yates and Wanda Orlikowski develop this notion of genre systems in "Genre systems: Structuring interaction through communicative norms."<sup>11</sup> They still share Bazerman's view of genre systems as sequences of interrelated communicative actions that structure collaborative work (structure is particularly important to them), and they see these genres as being "linked or networked together" to constitute "a more coordinated communicative process."<sup>12</sup> Genre systems do not just support a social activity, they comprise it.

However, there is a strand of genre systems work that strays from this conception in a number of ways. David R. Russell (1997) uses the term genre system to describe how genres function in activity systems. In Russell's view, genre systems are at play in given activities and sets of activities; they mediate these activities rather than just

<sup>5</sup> Bazerman, C. (1994). Systems of genre and the enactment of social intentions. In Freedman, A. and Medway, P., editors, *Genre and the new rhetoric*, pages 79-99. Taylor & Francis, London; Bristol, PA.

<sup>6</sup> Bazerman (1994), pages 97-98; cf. Bazerman, C. (2003). What is not institutionally visible does not count: The problem of making activity assessable, accountable, and plannable. In Bazerman, C. and Russell, D. R., editors, *Writing selves/writing societies: Research from activity perspectives*. [http://wac.colostate.edu/books/writing\\_selves/](http://wac.colostate.edu/books/writing_selves/), Available.

<sup>7</sup> Russell, D. R. and Yañez, A. (2003). 'big picture people rarely become historians': Genre systems and the contradictions of general education. In Bazerman, C. and Russell, D. R., editors, *Writing selves/writing societies: Research from activity perspectives*. [http://wac.colostate.edu/books/writing\\_selves/](http://wac.colostate.edu/books/writing_selves/), Available.

<sup>10</sup> Bazerman (1994), page 99.

<sup>11</sup> Yates and Orlikowski (2002).

<sup>12</sup> Yates and Orlikowski (2002) page 14.

communicate between people; they are brought into being by and reflect these activities, and play a vital role in inducting new members into these activities; they overlap as well as sequence, meaning that many may be brought to bear on a problem simultaneously; and they encompass informal as well as formal genres, shopping lists as well as books.<sup>13</sup> This strand is genetically related to Bazerman's earlier genre systems work, but has changed enough that it is quite similar to the framework of genre ecologies (discussed below).

<sup>13</sup> See also Bazerman 2003; Russell & Yanez 2003.

### *Genre Repertoires*

In their 1994 article "Genre repertoire: Structuring the communicative practices in organizations," Orlikowski and Yates acknowledge that genres do not just sequence, they overlap. Through these two sorts of coordination, genres work together to produce a more communicative practice. Members of a community "tend to use multiple, different, and interacting genres over time. Thus to understand a community's communicative practices, we must examine the set of genres that are routinely enacted by members of the community,"<sup>14</sup> and this set of genres is what Orlikowski and Yates term a genre repertoire. The authors recognize that this repertoire changes over time as new genres are improvised or otherwise introduced, and they suggest that explicating these changes over time can help us to understand changes in the community's communicative practices and organizing processes.

<sup>14</sup> Orlikowski and Yates (1994), page 542.

Orlikowski and Yates edge away from the rigidly sequential understandings of genre sets and genre systems here (although you notice that they return to that conception in 2002). The notion of genre repertoire is developmental and accounts for overlapping as well as sequential communicative actions. But at the same time, genre repertoires emphasize individual and group communicative performances: you perform a genre, but it doesn't perform you. That is, they still reflect an asymmetrical understanding of genre that exclusively deals with communication rather than mediation or (more broadly) distributed cognition. And because of the firm emphasis in communication, particularly communication in repeated enactments across a group, genre repertoires still emphasize the official rather than unofficial genres. Finally, the term repertoire itself emphasizes genres as performances, not as durable resources to be circulated.

### *Genre Ecologies*

The last framework I'll examine is that of genre ecologies. I should note that I'm particularly invested in this framework and that

it is relatively newer and perhaps less developed than the other frameworks. It grows to some extent out of the “second” conception of genre systems reflected in the later work of Russell and Bazerman, and should be seen as the result of a synthesis between genre theory and mediational theories of mind such as activity theory and distributed cognition.

At about the time I was coining the term genre ecology in my own unpublished work, Freedman and Smart published the article “Navigating the Currents of Economic Policy” (1997) in which they used the same term in print. Despite their different origins, the two conceptions draw on the same body of work and are similar enough that they can be discussed under the same heading.

In Freedman and Smart’s article, they base the notion of genre ecology on Edwin Hutchins’ notion of a tool ecology (1995). And like Hutchins, they use the term to refer to a symmetrical understanding of artifacts informed by distributed cognition. “Genres interrelate with each other in intricate, interweaving webs. These webs delicately trace routes and networks already in place,” Freedman and Smart explain.<sup>15</sup> In these webs or overlapping layers, genres do not necessarily have a sequential relationship, nor do they necessarily overlap in the sense that Orlikowski and Yates (1994) describe. Rather, they can be connected and used in rather different ways; the emphasis is on dynamism and adaptability to exigencies. In this framework, genres are not simply performed or communicated, they represent the “thinking out” of a community as it cyclically performs an activity. They represent distributed cognition in the sense that cognitive work is spread among the genres and the artifacts that belong to them, and opportunistic connections among those genres are historically made, cemented through practice, yet dynamic enough that new genres can be imported or can evolve to meet new contingencies.

These themes continue in later work on genre ecologies. In Spinuzzi and Zachry’s article “Genre ecologies: An open-system approach to understanding and constructing documentation,”<sup>16</sup> the authors stress contingency, or the opportunistic coordinations that people and activities make among genres;<sup>17</sup> decentralization, or the “distribution of usability, design, and intention across the ecology of genres” – a notion directly influenced by work in distributed cognition;<sup>18</sup> and stability, or “the tendency of users to make the interconnections between the genres they use conventional and official”<sup>19</sup> – a sort of “dynamic equilibrium” reached within the genre ecology. Since genres are contingent on each other, the success of any given genre depends

<sup>15</sup> Freedman, A. and Smart, G. (1997). Navigating the current of economic policy: Written genres and the distribution of cognitive work at a financial institution. *Mind, Culture, and Activity*, 4(4): 238-255; page 240.

<sup>16</sup> Spinuzzi, C. and Zachry, M. (2000). Genre ecologies: An open-system approach to understanding and constructing documentation. *Journal of Computer Documentation*, 24(3):169-181.

<sup>17</sup> Spinuzzi and Zachary (2000), page 173.

<sup>18</sup> Spinuzzi and Zachary (2000), page 174.

<sup>19</sup> Spinuzzi and Zachary (2000), page 175.

on its interconnections with other genres and how those genres jointly mediate a given activity.

That last point is important: rather than focusing on communication, as the other three frameworks have done, the genre ecology framework focuses on mediation. In *Tracing Genres through Organizations*, Spinuzzi (2003) describes this emphasis on mediation: “Mediated actions are not just a detour from unmediated actions, a different set of goal-directed steps leading to the same outcome. Rather, mediating artifacts qualitatively change the entire activity in which workers engage.”<sup>20</sup> A given genre mediates an activity, but it does not do so alone; it works in conjunction with the entire ecology of genres available. Spinuzzi calls this compound mediation.<sup>21</sup> As Spinuzzi demonstrates several times, genre ecologies are constantly importing, hybridizing, and evolving genres (and occasionally discarding them), and these dynamic changes in a genre ecology tend to change the entire activity. Yet that dynamism is counterbalanced by a relative stability, particularly in more mature activities: genres in an ecology “have developed relatively stable connections or coordinations with other genres.”<sup>22</sup>

It’s not an accident that in many of the quotes above, the agent is “genre” or “genre ecologies” rather than human beings. Genre ecologies are grounded in theories of distributed cognition, particularly activity theory, and consequently emphasize genres as collective achievements that act just as much as they are acted upon. Whereas the other frameworks are firmly asymmetrical, emphasizing a human being’s control over, performance of, and communication through genres, the genre ecology framework is more symmetrical, replacing the notions of performance and communication with the notion of mediation. Mediating artifacts, as Spinuzzi states in the quote above, change the entire activity – whether they communicate between people (as in memos, email, and presentations) or whether they are privately used to mediate one’s own actions (as in checklists, handwritten notes, and even highly arranged stacks of paper). This symmetrical, mediated, interconnected approach brings into question the sequential, communication-focused understanding of genre assemblages that we see in the other frameworks, and it also tends to highlight idiosyncratic, unofficial, often invisible genres. In that sense, genre ecologies are somewhat similar to the notion of “datacloud” that Johndan Johnson-Eilola has advanced.<sup>23</sup>

### *Conclusion*

These four frameworks, then, provide very different understandings

<sup>20</sup> Spinuzzi, C. (2003). *Tracing genres through organizations: A sociocultural approach to information design*. MIT Press, Cambridge, MA. page 38.

<sup>21</sup> Spinuzzi (2003), page 47.

<sup>22</sup> Spinuzzi (2003), page 48.

<sup>23</sup> Johnson-Eilola, J. (2001). Datacloud: Expanding the roles and locations of information. In *SIGDOC 2001 Conference Proceedings*, pages 47-54. ACM, Inc., New York.

of genre assemblages. Table 1 summarizes these differences.

	<i>Genre sets</i>	<i>Genre systems</i>	<i>Genre repertoires</i>	<i>Genre ecologies</i>
<i>Perspective</i>	Individual	Communitarian	Communitarian	Activity
<i>Model of action</i>	Communicative	Communicative	Communicative/ performative	Mediational
<i>Agency</i>	Asymmetrical	Asymmetrical	Asymmetrical	Symmetrical
<i>Relationship between genres</i>	Sequential	Sequential	Sequential and overlapping	Overlapping/ intermediational
<i>Foregrounded genres</i>	Official (stabilized)	Official (stabilized)	Official (stabilized)	Unofficial (dynamic) and official (stabilized)

This comparison among frameworks, I think, is valuable because it becomes clear that the different frameworks have rather different analytical focuses and support rather different agendas. In my own work, obviously, genre ecologies have best supported the sorts of analyses I do: analyses of mediation, particularly by unofficial texts. On the other hand, they do a poorer job of examining sequences of actions and may not be as well suited for examining routine sets of actions supported by official genres.

### *References*

- Antunes, P. and Costa, C. J. (2003). From genre analysis to the design of meetingware. In *Proceedings of the 2003 international ACM SIGGROUP conference on Supporting group work*, pages 302-310. ACM Press.
- Bazerman, C. (1994). Systems of genre and the enactment of social intentions. In Freedman, A. and Medway, P., editors, *Genre and the new rhetoric*, pages 79-99. Taylor & Francis, London; Bristol, PA.
- Bazerman, C. (2003). What is not institutionally visible does not count: The problem of making activity assessable, accountable, and plannable. In Bazerman, C. and Russell, D. R., editors, *Writing selves/writing societies: Research from activity perspectives*. [http://wac.colostate.edu/books/writing\\_selves/](http://wac.colostate.edu/books/writing_selves/), Available.
- Devitt, A. J. (1991). Intertextuality in tax accounting: Generic, referential, and functional. In Bazerman, C. and Paradis, J. G., editors, *Textual dynamics of the professions: Historical and contemporary studies of writing in professional communities*, pages 336-357. University of Wisconsin Press, Madison, WI.
- Freedman, A. and Smart, G. (1997). Navigating the current of economic policy: Written genres and the distribution of cognitive work at a financial institution. *Mind, Culture, and Activity*, 4(4):238-255.

- Hutchins, E. (1995). *Cognition in the wild*. MIT Press, Cambridge, MA.
- Johnson-Eilola, J. (2001). Datacloud: Expanding the roles and locations of information. In *SIGDOC 2001 Conference Proceedings*, pages 47-54. ACM, Inc., New York.
- Orlikowski, W. J. and Yates, J. (1994). Genre repertoire: The structuring of communicative practices in organizations. *Administrative Science Quarterly*, 39:541-574.
- Russell, D. R. (1997). Rethinking genre in school and society: An activity theory analysis. *Written Communication*, 14(4):504-554.
- Russell, D. R. and Yañez, A. (2003). 'big picture people rarely become historians': Genre systems and the contradictions of general education. In Bazerman, C. and Russell, D. R., editors, *Writing selves/writing societies: Research from activity perspectives*. [http://wac.colostate.edu/books/writing\\_selves/](http://wac.colostate.edu/books/writing_selves/), Available.
- Spinuzzi, C. (2003). *Tracing genres through organizations: A sociocultural approach to information design*. MIT Press, Cambridge, MA.
- Spinuzzi, C. and Zachry, M. (2000). Genre ecologies: An open-system approach to understanding and constructing documentation. *Journal of Computer Documentation*, 24(3):169-181.
- Williams, A. (2003). Examining the use case as genre in software development and documentation. In *Proceedings of the 21st annual international conference on Documentation*, pages 12-19. ACM Press.
- Yates, J. and Orlikowski, W. (2002). Genre systems: Structuring interaction through communicative norms. *Journal of Business Communication*, 39(1):13-35.
- Zachry, M. (2000). The ecology of an online education site in professional communication. In Malkinson, T. J., editor, *SIGDOC 2000 Conference Proceedings*, pages 433-442. ACM, Inc., New York.
- Zachry, M. (2001). Constructing usable documentation: A study of communicative practices and the early uses of mainframe computing in industry. *Journal of Technical Writing and Communication*, 31(1):61-76.

