

Between casual commitment and cross-media articulation – the faith of the Napkin

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Abstract. This paper presents an analysis of the Napkin, a collaborative technology designed to support news reporters in their struggle to handle the integrated production of news stories to multiple media platforms. The Napkin was abandoned while we studied it, and this raised the questions of what was wrong with the Napkin, and why did it fail? The Napkin suffered many of the problems known to CSCW: It lacked reciprocity of visibility and commitment between reporters and editors; it did not give sufficient overview of media processes and products, in particular it was impossible to motivate stories and overview their relationships with other stories. The casual metaphor of a Napkin was in contrast to how commitments got perceived by reporters and editors. The paper uses these discussions to revisit the notion of articulation work.

Keywords: CSCW, articulation work, overview, cooperation.

1 Situating the Study of the Napkin

Since the mid 1990s, newspaper companies have faced dramatic challenges due to stagnation or decline in the consumption of traditional media [11], new types of production technology, and new types of products. At present, media companies worldwide struggle with a new challenge called cross-media production: the integrated production of news stories to multiple media platforms (paper, TV, radio, etc.) [12]. Digital materials make it possible to produce content for several different media platforms, and the different strengths of the media further support new forms of news coverage that crosses these platforms. The very recent explosion of blogs and video podcasting are new examples adding to the family of products and ideally, the reporters become storytellers who choose the most suitable media for their story. The reality, however, is far more complicated: The Danish media company Nordjyske Medier was a local newspaper that has now diversified, and produces daily news for radio, TV, web, a daily newspaper and several additional products. All production is gathered in one location, where reporters produce news stories, to be distributed in the various media. The editorial staff of all media is placed literally in the middle of this location. We carried out an empirical study of cooperation and planning at the media company [1, 4]. The company used a production planning system in place, called the Napkin. The Napkin was not used very much, it was heavily criticized by reporters,

and it was at the point of being replaced by a different planning system, which was better integrated with the production system [9]. This system, too, was later abandoned. This has motivated us to understand better the processes of planning and articulating the cross-media production, and how IT supported such cross media production.

The media company was producing a daily newspaper, news for two radio stations, a 24 hours news TV channel, web pages, and additional products such as a free newspaper and mobile alerts. The newspaper contained national and international news as well as sections on life style, sports, etc. It had sections for local areas: the city and the districts surrounding it. The newspaper had one daily edition being printed at night. Radio produced hourly local news for the two channels along with longer background news. TV broadcasted its first news production early every morning, and the broadcasts ran as a loop with updates twice before lunch. Individual stories were re-edited or replaced, but there was no live anchor person in the studio. The remainder of the day was spent producing 20 minutes' newscasts for the evening. Web editors published available news as they occurred.

Reporters producing news stories were physically and organizationally placed in contents groups. Each group had a group leader coordinating the daily work. A media editor had the responsibility for filling the "space" of each medium, be it newspaper pages, or the radio news time slot. The media conductor maintained the general overview and coordinated stories across media platforms [1]. Physically, the acting media editors and media conductor were placed in the center of the building, called the Superdesk which was also the location of the formal meetings of the editorial staff.

The management of the media company had a vision that focused on gaining a larger share of the market through high-quality cross-media stories. Telling stories first, independent of media, producing versions for the different media types afterwards, would enhance quality and quantity of media products while reducing the cost. The media company focused both on providing diversified products to consumers on more media platforms, and on new ways of coordinating and dividing work in the organization. We studied the media company, when it was in the midst of a change process aimed at realizing this vision.

This part of the empirical study was carried out mainly in the spring of 2005. It focused on coordination and orchestration of cross-media production, specifically the role of the physical space and work arrangement, organizational roles, and coordinating artifacts.

The study combined interviews, questionnaires and counting methods with field-note based observations. These were carried out over a period of seven months, and consisted of full-day observations of activities in various locations, in particular the Superdesk and the location of all contents groups. We followed people responsible for different media (two media conductors, one media editor from each medium, and a couple of group leaders). We carried out 35 qualitative interviews and 43 follow-up questionnaires with journalists and managers.

In [1], we focused on the roles of cross media production, in particular that of the media conductor, and [4] analyzed the relationships between time rhythms, and place. The study of the Napkin and related technologies was carried out through a combination of specific qualitative interview questions concerned with how ideas and

stories were accounted for and communicated between reporters and editorial staff; focus on the use of the Napkin in the observations in the groups of contents, and when following editorial staff; and a situated demonstration of the Napkin by two daily users.

These activities were documented in interview summaries, verbal field reports, notes and screen dumps. Our analysis methods included qualitative readings of specific interview questions and field notes. In particular we focused on contradictions and tensions between statements, or between what interviewees said and what we had noticed in our observations. In this paper we occasionally use quotes from the material to illustrate the points of the analysis.

2 Conceptual Framing of the Analysis

Journalistic work processes and CSCW have been in focus when Bellotti & Rogers [2] and Forsberg & Ljungberg [6] describe how the daily news production is two-sided: On the one hand, news-production is about informing readers about what happens in the world with appropriate timeliness and judgment of importance. On the other hand is the internal production process-oriented side, focusing on the resources at hand and the internal deadlines. The ongoing tension between these two sides [4] was used to focus on internal and external media rhythms, and how they collided with cross-media rhythms.

In an activity as multifaceted as cross-media news production, there is a high degree of division of work, and many rules and procedures to make possible the daily production of newspapers, TV broadcasts, etc, independent of the persons working on a particular day. Though producing the substance for these media products is the primary activity, there is a lot of articulation work going on, secondary activities that it takes to e.g. divide, allocate, co-ordinate, schedule, mesh, and interrelate the individual work [13]. In some instances, this articulation work is separated out, to have its own purpose; in others, it is integrated with the primary activity. Since the Napkin is an instrument that supports articulation, these classical CSCW definitions help further place its roles in relation to division of work, allocation of jobs, co-ordination and scheduling of jobs.

Instruments, in the general understanding from activity theory have a (shared) externalized form, and are more or less well integrated in the daily routines of the users. Acting subjects use instruments to create an outcome out of materials [3], at the same time as these or other instruments are used in articulation in terms of communication among collaborators and of dividing work between the collaborators who create the full outcome of the activity. In the media company these instruments exist in a complicated web where it rarely makes sense to look at one at a time. The Napkin is one of these instruments. In this paper, we are particularly concerned with instruments of articulation across multiple media production processes. From our perspective, the production technologies for the various media are the instruments of the primary activity of producing various media products, whereas the Napkin, along with the Superdesk, is an instrument of the secondary activities of articulation work. This separation matches Bellotti & Rogers' [2] external and internal side of the production,

and the notion of product and production process related rhythms that we developed in [4].

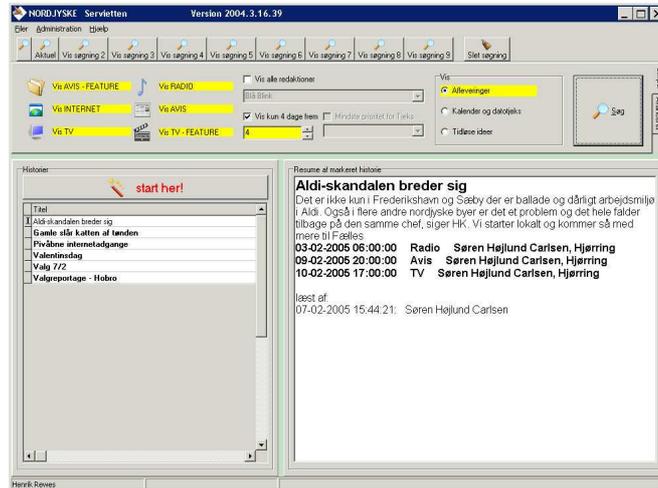


Fig. 1. The Napkin was named after the habit of reporters making notes on random materials, e.g. napkins, and was intended for registration of assignments, events and loose ideas. The idea was to provide the media conductor and the planning meetings with overviews of available ideas and stories, and to help reporters plan and share stories. When a reporter wanted to file an idea in the Napkin, he would either put a particular event into the calendar, e.g. as a reminder of a major sports event, an election, etc.; he would file a “timeless idea”, an idea that could be picked up anytime; or he would file a set of deliverables, in which case he also had to choose which media he planned for and which deadlines. The Napkin allowed the reporter to retrieve an overview of his own ideas and deliverables. Furthermore, it was possible for group leaders, media editors and media conductors to retrieve overviews of all stories proposed by a particular group, or all stories proposed for a particular medium on a particular day, or in a particular time period.

3 The Napkin in cross media production

Reporters were physically and organizationally placed in content groups. A group leader was coordinating the daily work of the group, and these contents groups can be seen as instruments of dividing work and allocating substance focus at an overall level. Each story was furthermore planned as part of the ongoing production schedule of several media products. The stories had to be completed to fit the deadlines of each particular media. In addition, each story had to arrive at the consumers to cover events, appropriately and timely.

For each media, a media editor was responsible for filling the “space” of the particular media product, such as the newspaper pages or the radio news time slot, by allocating, co-coordinating, scheduling, meshing the stories. Each media had its own

instruments, some more elaborate than others. E.g. TV used an application called Newsjoiner to coordinate, schedule, mesh, interrelate and carry out the production. Newsjoiner integrated the articulation and production of television news, once the stories had been planned for TV.

The media conductor maintained the general overview, coordinated stories and versions for the different media platforms. Planning, coordination and evaluation of the media products took place through a combination of meetings, the walking and talking of the media conductor, and the plans that got conveyed to the media conductor through the planning system, the Napkin. The Napkin is primarily used for reporters to publish their ideas and plans for the editorial staff to see. While media conductors were walking, media editors stayed in the Superdesk. Here formal meetings of the editorial staff took place, as well as many less formal encounters [4]. The daily structure of meetings among the media conductor, the media editors and the group leaders supplemented the allocation, coordination, scheduling and meshing work of the media conductor, since the media and the contents got a chance to meet at the meetings.

4 What was the problem with the Napkin?

In the following, we pursue the Napkin and its role in the producing and articulating cross media production. We focus on three tensions reoccurring in many forms in our empirical studies, and we use these tensions to discuss why the Napkin failed its role at the media company, and what it would take to better support the articulation of cross media production.

4.1 Personal plans and editorial overview?

Observations and interview statements point out that the Napkin was simply not used, and that there were many more ideas proposed and stories planned among the reporters, than accounted for in the Napkin. Registering a story in the Napkin was not integrated with the actual writing of the story or with other articulation instruments: One reporter, who also acted as media editor, complained: *“I don’t use the Napkin. It is no good that things aren’t integrated, you need to work in both the Napkin, Word and mail at the same time”*. A second media editor explained how the Napkin simply was not used enough, and how there were too many stories not accounted for in the Napkin.

In the interviews, reporters stated that they regarded the Napkin as extra work without anything in return, except for complaints. The reporters pointed directly to Grudin’s dilemma of who does the work and who benefits from it [7]. As an alternative to not filing stories in the Napkin, some reporters signed up stories for one day later than their actual intended deadline. That way, they would avoid being held accountable for missing a deadline. This is a way of optimizing their own behavior to avoid problems, that contrasts with what editors need from them to fill the newspaper pages, television slots, etc., and points to another of Grudin’s dilemmas [7], the prisoner’s dilemma.

At the time of our study, the Napkin was being replaced by a different planning system integrated with the production system. This system, too, demanded reporters to sign up ideas that could be turned into stories and events that needed follow-up. However, the system included media flexibility through which it was possible to integrate with the newspaper production system as well as with sound and video [9]. The system allowed stories to be formed based on one or more ideas, and the assignment of responsible reporters to the story. As this new system, too, has been abandoned, it is unlikely that integration with the production technology as such would solve this dilemma. Instead the above analysis points out that what is needed is an instrument that would give individual reporters and editors more benefit from the work that they put into using the shared system, helping editors create overview.

4.2 Storytelling or idea generation - what gets articulated?

Management's vision for the reporters was to become storytellers rather than newspaper or TV reporters. To become a storyteller, independent of media, or at least one that thinks story before media, seemed in contrast to the way reporters generally thought stories and media together, while considering whichever alternative versions of a story were suitable for other media. In one interview, the editor-in-chief pointed out that initially it was an indicator of quality that a story would appear in all media. However, they no longer looked at quality that way.

The groups of contents shared the responsibility for a particular topic such as sports. The groups shared ideas and planned their work in group meetings. From interviews with management we understand that the intent was, that reporters got to share stories and take over ideas from one another through the Napkin. However, from interviews with reporters and observations of actual group meetings we found that reporters rarely took over stories and ideas from each other, whether the ideas had been filed in the Napkin or not.

In the Superdesk meetings, the media conductor headed planning and evaluation and took charge in prioritizing the different stories: which stories will be useful and entertain the readers (listeners/viewers) on any given day? In general, there were always lack of stories for TV, and the prioritizing did not run smoothly. Several interviewed reporter talked about how, once it was clear that one was planning a particular story for the newspaper, "*the vultures arrived*" (as one of them called the media editors) to grab bites for the other media as well. As a result of TV's struggle to find enough stories, the Superdesk meeting often turned into a brainstorm meeting where ideas were picked up from e.g. the Napkin, and reshaped into something that could fulfill such needs. Many reporters strongly indicated that they did not like the fact that others (i.e. the Superdesk) picked and chose among their ideas without their own participation. Neither did they like that some of their ideas were totally ignored, and that the Superdesk or the media conductor came up with other stories for the reporter to work on. The Superdesk meetings had this rather casual and non-committed way of dealing with the ideas of the reporters, which is in contrast to the way reporters saw their contribution, as commitments to producing a particular story for particular media at a particular time.

The reporters saw themselves as producing and completing stories, rather than generating ideas. It seemed inappropriate for them to register several stories in the Napkin at a time when the story was mainly a loose idea. Furthermore, it seemed self-contradictory to many reporters to register an idea to the Napkin, that they would later, after the meeting in the Superdesk, be asked to complete, or not. Proposing the idea in the Napkin did not help complete the story, and the proposal did not become a plan until it had been through the hands of the media conductor.

The Napkin mainly supported the reporter's individual anticipation of what and how (title, deadline, etc.). When reporters complained about the way the Superdesk handled their stories, they indicated that the editorial staff did not understand the motivation behind an idea or a story. And they often lacked motivation in the other direction: when they were told to produce a certain story for a certain medium, they did not understand why. For all reporters and editorial staff to become part of articulation and production of the total cross media product, they needed to see their own role and their shared contribution to all of the media products and processes. Reporters needed to understand better how their particular stories fitted in with other stories in the particular media product. In the Napkin, there was no way for the reporter to motivate the idea or to place it in context of other ideas, themes or stories. From this perspective, the existing articulation of ideas or stories needs to be supplemented with a better, and two directional, way of motivating ideas and stories. Also it is insufficient to focus on singular stories. In particular the overview of contents of each media product that was mainly held by the media conductor (see [4]) would provide a better motivational context for reporters, if it were available to all.

4.3 Casual commitment or visibility for all?

One reporter pointed out what happens when one makes something public, lasting and to be accounted for that is really only an ephemeral idea [8]. When reporters wrote something into the Napkin, it was there for them to use in their planning here and now, but it was also there for everybody to see days and weeks later. She found it nice to use the Napkin for her own planning, but less appropriate that plans became public. The Napkin primarily broadcasted ideas of the reporters to other reporters, media editors, group leaders and media conductors. Feedback on these ideas, either in terms of new ideas or precise production plans, came to the reporters through other means. The media conductor made rounds to introduce reporters to their ideas [4], and to adjust the ideas of the reporters to the plans of the media conductors. In those encounters with the media conductor, the reporters also told about ideas that were not necessarily accounted for in the Napkin. Similarly, group leaders utilized their own meetings and talks with reporters to make overviews and plans (on paper) that they brought and adjusted in the Superdesk meetings. One of the content group leaders even told that she had invented an overview mechanism of her own as a portable alternative to the Napkin. This addressed such elements as top stories, page number, TV, radio and the reporter responsible for the story in question. She printed the form and brought it with her to Superdesk meetings in order to keep track of the different media stories.

The process of making commitments public in one direction was a problem in several respects: The feedback was individualized and lacked tool support; the actual cross-media plans were not public, they were decided in the Superdesk meetings without the participation of reporters, and brought out of the meetings through the walking and talking of the media conductor, the group leaders, and the media editors. The visibility of commitments was not matched with a similarly public and firm commitment from the editors.

Only the media conductor really had the overview, and hence the control of delegation and feedback. Not even the Superdesk meetings had a shared overview of products, how they were scheduled, how stories were anticipated to fit in; nor of the current actual production status of the different media. The Napkin was never designed to provide this, and accordingly, it needed to be supplemented with a way of feeding back overview and product plans from the editorial staff to the reporters. The overall cross media articulation was mainly carried out by the media conductor, while walking the building [4]. Similar to what Bellotti & Rogers noted [2], it seemed necessary for a technology like the Napkin to move beyond the desktop and become mobile; to follow the media conductor as he moves, or the group leaders and reporters as they attend their activities in the Superdesk. This would perhaps reduce the feeling of double work experienced by the reporters and editors? The overview would also need to be shareable in the meetings, which basically means that the overview must come in different forms that may migrate e.g. between small mobile technologies, and larger, shared displays in the Superdesk and elsewhere.

5 From articulation to sharing

In the case of the Napkin and cross media news production, what it means to do the work and to benefit from it, takes on new dimensions: First of all, producing a story based on an idea was an important, but minor, part of the ongoing day-to-day production of several media products. This articulation involved many instruments in the hands of many different groups of users. The Napkin served the intermediate steps in the articulation process by *making ideas public*, in order to be managed and scheduled in various ways by the individual reporters and by editorial staff. The consecutive step from making ideas public to completing timely stories was much more informal and carried out through a number of casual encounters between reporters and editorial staff. Reporters requested *feedback* through the Napkin from this step, in terms of overview of stories and deadlines. This would give them something in return for the work of filing ideas into the Napkin. Such feedback, however, could not be generated from the information in the Napkin alone. *Overview of the current state of products and processes* was dependent on the planning of the media editors and media conductor. However, instruments to make *their* schedules publicly available lacked entirely. A better overview of all daily products as they were in the making would more profoundly motivate the work of each reporter and editor.

The biggest and most immediate problem, however, was the one-way submission by reporters of premature ideas that they felt committed them to producing a story. Through the Napkin, these premature and sketchy ideas were transformed from 'here

and now' to 'everywhere and forever', in the manner described by Grudin [8]. While metaphorically, the Napkin indicated casual planning in the making, the visibility, permanency and commitment of the entries in the system did exactly what Grudin warned against: making the ideas available everywhere and forever. The reference to the casual metaphorical background of the napkin didn't hold. In addition, the receivers of this made-public information allowed themselves to stay uncommitted, informal, and in private (or at least in one-to-one situations), further emphasizing the imbalance between those producing and those receiving.

The Media Company seemed at a crossroad: Was casual commitment a possibility? A substitute for the Napkin could either be designed to move cross-media production in the direction of increased cooperation, where better overview would be provided for all, the one-way commitment down-scaled, reciprocity enhanced, and reporters more involved in the selection and choice of stories to be pursued. Or it could support a further division of work, where the emphasis was on more detailed plans, fed back from the Superdesk to reporters, and less on understanding why. While some sort of division of work would obviously be needed in a production this complicated, it is nonetheless a good question whether quality media products could come out of such a tailoristic approach to articulation.

This crossroad at the same time illustrates the problem, discussed e.g. by Bødker & Mogensen [5], of the analytic separation of work and articulation work. With production processes as multiple and complicated as cross-media production, the separation of work and articulation work is conceptually problematic: something that is in one instance the job of somebody, is in other instances part of the articulation. What is an appropriate level of identifying the activity as "the real job" may change: For long parts of the production, the actual stories are of minor relevance, while the totality of the media coverage is in focus. At other times the specific, timely versioning of a story for a particular media is essential, which the success or failure of e.g. the daily newspaper may depend upon entirely. The separation is equally problematic design-wise, and our discussion point out the many ways in which it is essential to integrate the mediators of articulation with those of story and (cross) media production.

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References

1. Aaløkke, S., Bjerrum, E., Bødker, S. & Bechmann Petersen, A. Gate Keeping or Bridge Building? - Cooperation, Learning and Boundary Working in a Cross-media Workplace. OLKOS Trento (2005).
2. Belotti, V. & Rogers, Y. From Web press to Web pressure: multimedia representations and multimedia publishing. Proceedings of CHI, pp. 279-286, ACM Press, New York (1997)
3. Bertelsen, O. W. & Bødker, S. Activity Theory. In Carroll, J. (ed.). *HCI Models, Theories, and Frameworks: Toward an Interdisciplinary Science*, ch.11, pp. 291-324, San Francisco, CA, USA: Morgan Kaufman Publishers (2003)
4. Bødker, S. & Petersen, A. B. Seeds of cross-media production, *Journal of Computer Supported Cooperative Work*, 16(6):539-566, 2007.
5. Bødker, S. & Mogensen, P. One woman's job is another man's articulation work. In Robinson, M. & Schmidt, K. (eds.), *Developing CSCW Systems: Design Concepts. Report of the CoTECH WG4*, pp. 149-166 (1993)
6. Forsberg, K. & Ljungberg, F. The Organising of Editorial Work: Eliciting Implications for New IT use. In N. J. Buch, J. Damsgaard, L. B. Eriksen, J. H. Iversen & P. A. Nielsen (eds). Proceedings of the 21st Information Systems Research Seminar in Scandinavia, pp. 223-234 (1998)
7. Grudin, J. Why CSCW applications fail: problems in the design and evaluation of organizational interfaces. Proceedings of the Conference on Computer-Supported Cooperative Work, Portland, OR. pp. 65-84, ACM Press, New York (1988)
8. Grudin, J. Group dynamics and ubiquitous computing. *CACM* 45(12): 74-78 (2002)
9. Larsen, J. Videnstyring på medier, Center For Journalistisk Efteruddannelse, Aarhus (2003)
10. Nilsson, M. & Hertzum, M. Negotiated rhythms of mobile work: time, place, and work schedules. *GROUP 2005*, pp. 148-157, ACM Press (2005)
11. Pavlik, J. V. & McIntosh, S. *Converging Media*, Pearson Education (2004)
12. Petersen, A. B. *Mediediffusion*, Centre for Internet Research, University of Aarhus (2006)
13. Schmidt, K. & Bannon. L. Taking CSCW seriously: Supporting articulation work. *Journal of Computer Supported Cooperative Work*, 1(1-2):7-40, 1992.