



The emergence of sensemaking through socio-material practices

Journal:	<i>Journal of Organizational Change Management</i>
Manuscript ID	JOCM-10-2018-0280.R1
Manuscript Type:	Research Paper
Keywords:	sensemaking, organisational change, practice, socio-material

SCHOLARONE™
Manuscripts

The emergence of sensemaking through socio-material practices

Structured Abstract

Purpose: The purpose of this study was to increase understanding of how sensemaking occurs as a holistic, processual phenomenon during an organisational change.

Design/methodology/approach: A longitudinal, qualitative case study was conducted by analysing video-recorded meetings among the staff of two recently-merged surgical departments in a university hospital. Sensemaking was approached through the lens of socio-material practices.

Findings: The analysis revealed that material-discursive practices produce sensemaking in various ways, creating a holistic process and a dynamic agency. Four sensemaking practices were identified through which personnel made sense of the development of ward inpatient rounding: facilitated meetings, a status board, video analysis, and humour.

Originality/value: This paper identifies diverse sensemaking practices, each of which increases understanding of sensemaking as a holistic, processual phenomenon that emerges through socio-material practices. The paper also enhances practical understanding of how sense is made of a working practice, as well as how a working practice is developed and improved during an organisational change.

Keywords: sensemaking, organisational change, practice, socio-material

Introduction

Organisational change is a collective effort and hence requires collective sensemaking. In sensemaking research, scholars often distinguish between sensegiving (how senior management pursues change) and sensemaking (how change recipients act as active participants in translating the change initiated by management) (Gioia and Thomas, 1996; Rouleau and Balogun, 2011; Sonenshein, 2010). While this approach is very useful in analysing sensemaking as a dialogue between different organisational actor groups, it suggests that sensemaking occurs sequentially rather than as a continuous process (Brown *et al.*, 2015; Lüscher and Lewis, 2008; Maitlis and Christianson, 2014; Sonenshein, 2010). However, there is an emerging opposing viewpoint that adopts a relational ontology and approaches sensemaking as an ongoing process influenced by practices and materiality (Hultin and Mähring, 2017; Nicolini, 2012; Orlikowski and Scott, 2015).

This paper examines sensemaking as a simultaneous, holistic process. A practice lens is helpful for understanding and describing practices as socially constructed activities within specific contexts, including socio-materiality (Hultin and Mähring, 2017; Schatzki, 2001). Socio-materiality in this study means that sensemaking emerges not only through human actors but also through social and material practices (Hultin and Mähring, 2017; Scott and Orlikowski, 2014). The aim of this study was to understand the practices that generate sensemaking within a multiprofessional team during an organisational change. For this purpose, a case study of a planned organisational change involving a merger of two surgical departments in a university hospital was analysed. Particular emphasis was placed on identifying social and material practices that advance collective sensemaking (Nicolini, 2012). The analysis revealed multiple mechanisms that helped the team make sense of a working practice development. These mechanisms are termed 'sensemaking practices'

1
2
3 because they foster the sensemaking process by creating opportunities for discourse,
4 reflection, and meaning construction.
5
6
7
8

9 **Theoretical framework**

10
11 Organisational change is a complicated, dynamic, dialectical process that is influenced by its
12 own progression (Castel and Friedberg, 2010; Jian, 2011; Schreyögg and Sydow, 2011).
13 Sensemaking is widely understood as the process of building understanding of ambiguous or
14 complicated phenomena such as organisational change (Brown *et al.*, 2015; Mills *et al.*,
15 2010). Research shows that there is a strong relationship between sensemaking, emotions,
16 change commitment, efficacy and expectations (Helpap and Bekmeier-Feuerhahn, 2016;
17 Steigenberger, 2015). Wider societal institutional logic helps organisational actors make
18 sense of change initiatives, especially in cases with no clear local logic (Khan, 2017).
19
20
21
22
23
24
25
26
27
28

29 The principles of the sensemaking approach are largely based on Weick's framework,
30 which focuses on how meaning is created during organisational events (Weick, 1995).
31 Numerous studies on sensemaking have been published since this framework's introduction
32 (e.g., Brown *et al.*, 2015; Maitlis and Christianson, 2014; Mills *et al.*, 2010; Nicolini, 2012;
33 Rouleau and Balogun, 2011; Sonenshein, 2010).
34
35
36
37
38
39
40

41 Maitlis and Christianson (2014, p. 67) defined sensemaking as 'a process, prompted
42 by violated expectations, that involves attending to and bracketing cues in the environment,
43 creating intersubjective meaning through cycles of interpretation and action, and thereby
44 enacting a more ordered environment from which further cues can be drawn'. In short,
45 employees engaged in sensemaking try to understand what is happening and how to respond.
46
47
48
49
50
51

52 Instead of treating sensemaking and sensegiving as separate or sequential activities
53 (Gioia and Thomas, 1996; Rouleau and Balogun, 2011; Sonenshein, 2010; Weick, 1995), this
54 work approaches sensemaking as a holistic process (Brown *et al.*, 2015; Lüscher and Lewis,
55 2008; Maitlis and Christianson, 2014; Sonenshein, 2010). The actors involved were both
56
57
58
59
60

1
2
3 sensegivers and sensemakers during the organisational change process. Among organisational
4
5 actors, social meanings develop via the interplay of sensemaking and discourse (Fairclough,
6
7 1995). While sensemaking happens through discourse, it is also embedded *in practices*
8
9 (Weick, 1995). This means that actors do not randomly draw on the past and make it relevant
10
11 to the present; instead, their approach depends on the social and material-discursive practices
12
13 in which they are embedded (Hultin and Mähring, 2017; Langely *et al.*, 2013).
14
15

16
17 In this study, sensemaking was analysed through the lens of practice, with particular
18
19 emphasis on social and material practices (Hultin and Mähring, 2017; Nicolini, 2012;
20
21 Orlikowski and Scott, 2015). While sensemaking can be seen as an intersubjective activity,
22
23 subjects (individuals, practices, and materials) can also serve as the objects of sensemaking,
24
25 creating a ‘flow of agency’ (Hultin and Mähring, 2017, p. 3). This study shows that
26
27 sensemaking is enhanced by and emerges from so-called ‘sensemaking practices’.
28
29 Consequently, it is proposed that the nexus of sensemaking practices lies at the junction of
30
31 social practices, material practices and sensemaking (see Figure 1).
32
33
34

35
36 *Please insert Figure 1 approximately here.*
37
38

39 **Research context and methodology**

40
41
42 Social and discursive practices influence and are influenced by the institutional context and
43
44 pressures in which they occur (Bertels and Lawrence, 2016). The research context of this
45
46 study was healthcare, a field that has been shaped by strong traditions but faces strong
47
48 pressure to renew. Factors such as digitalisation, changing work environments, the economic
49
50 recession, and shortages of physicians and nurses pose significant challenges to healthcare
51
52 organisations (Aiken *et al.*, 2014; Alameddine *et al.*, 2012; Lu, 2015). Moreover, healthcare
53
54 organisations are generally harder to manage than organisations operating in other fields,
55
56
57
58
59
60

1
2
3 making organisational change management in healthcare particularly complex (Dyck, 2006;
4
5 Ramanujanam and Rousseau, 2006; Swensen *et al.*, 2016).
6

7
8 The study was conducted in a surgical department in a university hospital (UH) that
9
10 provides specialised care. Hospitals have been described as environments in which the
11
12 different worlds of physicians, nurses, managers and trustees collide (Glouberman and
13
14 Mintzberg, 2001). Hospitals operate largely through work-based multiprofessional teams in
15
16 which professionals such as surgeons, anaesthesiologists, nurses, specialised nurses,
17
18 administrative staff, and medical students work together, pooling their expertise to benefit
19
20 patients (Bender *et al.*, 2013; Swensen *et al.*, 2016). Previous research has shown that the
21
22 needs and input of different professional groups must be considered when directing change in
23
24 such environments (Liff and Andersson, 2012; Weber and Glynn, 2006).
25
26
27
28

29 *Method*

30
31 Case studies are useful for understanding organisational situations and occurrences, and a
32
33 single case study method is suitable for analysing change (Eisenhardt, 1989; Yin, 2003). The
34
35 case study discussed in this paper was qualitative and longitudinal, focusing on video-
36
37 recorded meetings held on a regular basis. Qualitative methods are especially useful for
38
39 studying phenomena where context matters (Gubrium and Holstein, 2009) – in this case, the
40
41 development of working practices in a hospital environment undergoing organisational
42
43 change.
44
45
46

47
48 The practice lens was used to analyse a team's sensemaking of a development in
49
50 working practice over 12 months in the UH following the merger of two surgical
51
52 departments. The authors received a research permit from the UH and the informed consent
53
54 of all participants in the facilitated development meetings. With the participants' prior
55
56 agreement, all organisational change-related team meetings were video-recorded for research
57
58 purposes. Because of its suitability for careful examination of speech, the video recordings
59
60

1
2
3 were analysed using discourse analysis (Balogun *et al.*, 2014; Brown *et al.*, 2015; Grant and
4 Marshak, 2011; Jones *et al.*, 2017; Kärreman and Alvesson, 2001). The analysis was based
5
6 on nine video-recorded meetings.
7
8
9

10 *Starting point for the merger: December 2016*

11
12
13 In 2016, the management of the UH encouraged synergistic mergers between departments
14 that could increase the hospital's overall operational efficiency. As a result, surgical wards 8
15 and 9 were selected for merging. For over 30 years, these wards had been adjacent but
16 separate, with little interaction between them. Both wards treated patients recovering from
17 surgery and requiring specialised care. Patients were assigned to the wards based on their
18 diagnoses: ward 8 cared for those suffering from lower digestive track diseases, while Ward 9
19 cared for those with upper digestive track diseases. Although the two wards had always been
20 situated next to each other, separated only by a hall and having shared access to elevators and
21 stairs, they had mostly operated separately, with their own staff, budgets, facilities and
22 patients.
23
24
25
26
27
28
29
30
31
32
33
34
35

36 At the end of 2016, each ward was staffed by approximately 35 nurses (led by a ward
37 nurse) and roughly 10 surgeons (led by a chief doctor). The surgeons were divided between
38 the two wards based on their specialisation. One chief doctor was technically in charge of
39 both wards, but they remained separate entities in practice. As preparation for the change, in
40 March 2016, the ward personnel organised a brainstorming session. In addition, the
41 management team organised a couple of information sessions for ward personnel towards the
42 end of 2016.
43
44
45
46
47
48
49
50
51

52 *Implementing the change: January 2017 – December 2017*

53
54
55 The following concrete changes were implemented immediately at the beginning of January
56 2017: (1) a shared name was chosen, (2) a shared budget was established, (3) a shared ward
57
58
59
60

1
2
3 nurse was selected, and her office was transferred to a room in the hall between the two
4
5 corridors (to emphasise fairness and unity), and (4) patient room numbers were changed to
6
7 run across both corridors consecutively (previously, Wards 8 and 9). Some features were left
8
9 intact: (1) the physical premises, as the personnel and patients remained in their original
10
11 premises in the two former wards, and (2) the assignment of patients to beds based on their
12
13 diagnoses. Consequently, the surgeons also generally remained in their former wards.
14
15

16
17 The organisational change officially occurred at the beginning of 2017 as a result of
18
19 decisions and planning initiated by the hospital's management. The research for this study
20
21 started simultaneously as, in practice, this change marked the beginning of the sensemaking
22
23 process for all personnel, which lasted for an entire year. Regular multiprofessional team
24
25 meetings were planned and organised during 2017 so that staff could share their concerns,
26
27 discuss, and agree upon new working practices. Management (surgeons, other doctors, and
28
29 ward nurses) attended the team meetings as participants with equal standing to other
30
31 employees (nurses and administrative staff).
32
33

34 35 36 *Data collection*

37
38 Videos are useful for analysing social interaction because they reveal how people
39
40 communicate with each other and how groups think and react in real time (Brown *et al.*,
41
42 2015; Kärreman and Alvesson, 2001). Accordingly, the key sources of data for this study
43
44 were videos of facilitated team meetings between diverse, hierarchical participants all making
45
46 sense of the same organisational change. Videos of authentic organisational change meetings
47
48 and sensemaking processes, especially with a longitudinal approach, are currently rare, and
49
50 thus represent a novel form of empirical data (Meyer *et al.*, 2013; Vaara *et al.*, 2016).
51
52
53

54
55 The team meetings took place throughout 2017, in January, February, March, April,
56
57 May, June, September and December. All nine meetings were video-recorded (over 18 hours
58
59 in total) and transcribed (122,605 words in 403 pages). Video recording was planned
60

1
2
3 beforehand in collaboration with the team-meeting facilitator, who routinely recorded
4 meetings so that team members could learn from their own discussions and behaviours.
5
6 Permission to use the videos for research purposes was obtained from the participants. In
7
8 addition, three of the authors acted as participant observers in some of the meetings, and one
9
10 author actively participated in two of the meetings and in leading the change.
11
12
13

14 15 16 *Data analysis*

17
18 The data were analysed in three main phases, each of which included iteration. First, the
19
20 meeting videos were organised and watched, and transcribed in a timely manner. During this
21
22 phase, meeting participants (facilitators, doctors/surgeons, head nurses, nurse managers,
23
24 nurses, secretaries and researchers) were counted and listed, and the key topics discussed in
25
26 the meetings were summarised. This resulted in the emergence of an overall picture of the
27
28 organisational change and associated events as a processual narrative.
29
30
31

32
33 Second, to determine how participants attempt to influence each other, individual
34
35 fragments of discussion were extracted and analysed in their situational context (Balogun *et*
36
37 *al.*, 2014). To maintain a sustained analytical focus, one contextually bound discursive
38
39 trajectory was chosen for more detailed analysis: ward inpatient rounding. This trajectory was
40
41 chosen because the data revealed it to be a central practice under development during the
42
43 change process, and because it involved all meeting participants and patients. During this
44
45 stage, topical extracts of conversations related to ward inpatient rounding were compared in
46
47 terms of their differences and/or similarities.
48
49

50
51 Third, following Grant and Marshak (2011, p. 221), ‘questions such as how, precisely,
52
53 do discourses construct social reality, especially regarding organisational change’ were
54
55 considered. During this stage, material-discursive practices were sought as a complementary
56
57 approach to the more traditional view, which considers sensemaking as a purely cognitive or
58
59 socially constructed process that occurs among interacting people (Hultin and Mähring, 2017;
60

1
2
3 Nicolini, 2012). As a result, three practices were identified, each of which prompted
4
5 sensemaking among the personnel: facilitated meetings, a status board, and video analysis.
6
7 Discussions of daily matters also serve as means by which people can make sense of topics
8
9 not directly mentioned (Brown *et al.*, 2015; Kärreman and Alvesson, 2001). Therefore,
10
11 ‘underlying structures beneath and between the basic text and speech’ (Jones *et al.*, 2017, p.
12
13 487) were also sought. By focusing on the atmosphere and body language of the meeting
14
15 participants, it was possible to identify a fourth practice that was central in making sense of
16
17 the hospital rounding practice: humour (joking and sarcasm about challenges). The following
18
19 section discusses these sensemaking practices in more detail.
20
21
22
23
24

25 **Results: Sensemaking practices**

26
27
28 The analysis revealed four sensemaking practices through which the personnel made sense of
29
30 the development of ward inpatient rounding during the organisational change: facilitated
31
32 meetings, a status board, video analysis and humour (see Figure 2). These practices can be
33
34 seen as sites of engagement in which discourse and practice intertwine (Jones *et al.*, 2017;
35
36 Nicolini, 2012; Scollon, 2001).
37
38
39

40 *Please insert Figure 2 approximately here.*

41 42 43 1) *Facilitated meetings*

44
45 Organisational actors make sense of current events through discourse and social construction,
46
47 whereas meaning is negotiated (Hardy *et al.*, 2005; Weick, 1995). Facilitated development
48
49 meetings were an important mechanism for the personnel to discuss and negotiate ward
50
51 rounding. The external facilitator had a strong role in these meetings, as she pre-determined
52
53 the topics to be discussed, guided the discourse, and opened and concluded the meetings. The
54
55 following conversation sample is from a meeting in September where the personnel discussed
56
57 ward rounding practice development and the central role of the facilitated meetings:
58
59
60

1
2
3 Nurse: 'What we have been whispering here at the back, the back row girls, is that looking back
4 retrospectively this year, this past eight months, we have achieved an awful lot. In the spring it felt
5 like this might not work at all and we weren't sure what we might achieve, but now we can be pretty
6 proud'.

7 Surgeon: 'Yes'.

8 Nurse: 'A (the facilitator) is a fine leader'.

9 Surgeon: 'Exactly, we need that kind of an external...'

10 Nurse: '...to open things up'.

11 Surgeon: 'Yes, an evaluator who professionally opens up issues and focuses on those things and...'

12 Facilitator: 'Thank you'.

13 Surgeon: 'And suggests solution models that have been used elsewhere and...'

14 Nurse: '...picks those things up from our babbling'.

15 All: Laughter

16 Surgeon: 'That is professionalism. We have in this house many success stories in which you have
17 been the catalyst, for example in care. Now it is a fantastic thing that on the operational side, we are
18 the two wards to have merged so the others can then learn from us'.

19
20 The example shows that with the help of facilitated meetings, the facilitator was able to
21 empower the personnel to create meaning and construct influence collectively and across
22 hierarchies through discourse.
23
24
25

27 2) *The status board*

28
29 Sensemaking can also emerge from material-discursive practices in which human actors are
30 decentred and the flow of agency becomes central (Hultin and Mähring, 2017). In this case
31 study, a key challenge in ward rounding practice was that the surgeons did not know which
32 nurses were available for the inpatient rounds, and vice versa. Additionally, nurses and other
33 staff did not always know which patients had already been checked and by which surgeons.
34 To solve this problem, the personnel decided to test a status board system (which was already
35 used in the emergency unit) that would visually list all the patient rooms. In this system, after
36 a surgeon checked a patient room, he or she would circle the room number on the status
37 board at the central office for others to see. The following comments illustrate the board's
38 role in developing the ward rounding practice:
39
40
41
42
43
44
45
46
47
48
49
50
51

52 Surgeon C: 'The biggest change was that in the morning at the office, we would look (at the status
53 board) to see which patients needed to be checked and then the surgeon could mark himself a room'.

54 Facilitator: 'I will show you a picture'.

55 Surgeon C: 'This surprisingly small thing helped us slowly develop a clearer understanding by letting
56 us immediately see what's happening. It lets us avoid a situation where someone goes around one
57 room and checks a patient there but only makes a note of it for themselves, so we avoid duplicating
58 work - no one else goes there. This is surely a good (thing). You can also notify that you only
59 checked one patient in the room and had no time for anything else'.

1
2
3 Experimentation with this new practice caused a partial shift of agency from person-to-person
4 communication to the status board, thereby merging the 'sense' and 'action' of inpatient
5
6 rounding into one process. The board became the material that generated sense through
7
8 collectively agreed-upon codes. In conclusion, the status board represented a socio-material
9
10 practice through which collective sensemaking emerged.
11
12
13

14 15 16 3) *Video analysis*

17
18 'Discursive practices need to be considered side by side with other forms of social and
19 material activity (Nicolini, 2012, p. 6)'. With the permission of the personnel, the facilitator
20 video-taped various real-life situations in the ward after the merger. In the facilitated
21 meetings, the personnel watched their own normal daily operations on video, evaluated their
22 working practices as a team, and shared their thoughts on what they saw and heard. The
23 conversation quoted below, which is an excerpt from a team discussion of a video of ward
24 rounding activity, illustrates the power of video analysis as a sensemaking practice.
25
26
27
28
29
30
31
32

33
34 Facilitator: '...Based on what principles were the patients chosen to be checked during the daily
35 inpatient rounding practice?...'

36 Nurse manager: 'That was really unclear'.

37 Nurses (2): 'That is shocking'.

38 Doctor: 'The answer is: there were no such principles'.

39 All: Laughter

40 Nurse: 'Confusing'.

41 Nurse (imitating a surgeon): 'I may have operated on a patient, I might visit him on my round, I
42 might go...'

43
44 When the multiprofessional team could *see* that something did not work, it was easier for
45 them to accept the need for change. Thus, video analysis became an important sensemaking
46 practice for the personnel during the change process, representing a different kind of socio-
47 material practice to, for example, the status board.
48
49
50
51
52

53 54 4) *Humour*

55
56 Organisational actors may use humour to highlight paradoxes and contradictions at work
57 (Jarzabkowski and Le, 2016). Interestingly, during meetings, personnel commonly joked
58
59
60

1
2
3 about issues they found challenging. It thus seems that humour may be used to deliver
4
5 messages that would otherwise be difficult to articulate. The next example was taken from a
6
7 meeting where the participants had divided into small groups and were preparing to watch a
8
9 video of their daily operations from different viewpoints.
10
11

12 Facilitator (to one of the sub-teams): 'Look for the principles the surgeons use when dividing patients
13 between themselves for ward rounding, and also look for the principles the nurses use in sharing the
14 patients...'

15 Surgeon: 'To the latter one I have no answer...'

16 All: Laughter
17

18 The reason the personnel found the surgeon's comment funny (as it was meant to be, based
19
20 on his tone and body language) was that what he said was true. A real, daily difficulty on the
21
22 ward was that personnel had no clear rules for deciding how to allocate patients between
23
24 professions during ward rounding. Instead, doctors used one logic and nurses used another,
25
26 and both these logics were unclear to many. Here, the problem was disguised as a joke. The
27
28 participants continued by discussing whether surgeons always checked the patients on which
29
30 they had operated, and whether they also completed those patients' paperwork:
31
32
33

34 Secretary: ...'situations vary'.

35 Surgeon: 'We try hard. And if the patient ('s situation) becomes more complicated, people usually
36 become more interested in checking on him...'

37 All: Laughter
38

39 Again, a delicate issue was raised through humour. As the surgeons are usually needed in the
40
41 operating theatres, they do not necessarily have time to check all their patients in the ward.
42
43 Especially if a patient is recovering relatively well, his or her surgeon may postpone the
44
45 checking procedure or delegate it to other personnel. This conflict of priorities between
46
47 surgeons, nurses and recovering patients was discussed in the meetings, and humour was
48
49 used to help make sense of it.
50
51
52

53 **Conclusions**

54
55
56 This research expands our understanding of organisational change and sensemaking, and
57
58 addresses calls for a better understanding of sensemaking as an iterative process wherein
59
60

practices and materiality are central elements (Hultin and Mähring, 2017; Nicolini, 2012; Orlikowski and Scott, 2015).

The analysis presented here contributes to theory by showing that approaching sensemaking as a holistic process can be useful when analysing organisational change, and by demonstrating how sensemaking emerges through socio-material practices. In the holistic approach, actors are both sensegivers and sensemakers simultaneously, and are also dependent on and influenced by socio-materiality that develops throughout the process. These socio-material practices can be seen as sites of engagement, where discourse, materials and practices intertwine, forming a dynamic agency for change. Analysis of a case study on a healthcare environment in which two surgical departments had recently merged revealed four practices through which the personnel made sense of developments in ward inpatient rounding: facilitated meetings, a status board, video analysis, and humour. The identification of these specific sensemaking practices adds to existing theory, especially in the fields of practice and change. Moreover, it could be used to increase practitioners' understanding of how organisational actors enhance their sensemaking while implementing a planned organisational change.

The first of the identified practices - regular facilitated development meetings - formed the core mechanism for sensemaking and offered an important opportunity to discuss changes amongst colleagues. The analysis suggests that in terms of leading change, sequential development meetings provide a useful way for management to maintain awareness of staff feelings and perceptions during the change process. Regular meetings also give the often ambiguous change process a clear rhythm, allowing participants to feel that they retain a degree of control and giving the process some predictability.

The second identified practice, video analysis, was a routine aspect of the development meetings that offered instant reflection points for the team (whose members

1
2
3 spanned many levels of the organisational hierarchy, ranging from secretaries to the head of
4 department). The practice of collectively watching and analysing videos of an organisation's
5 daily processes seems to be a good way for practitioners to identify aspects of their
6 operations that require development. Through video watching, bad news is delivered to the
7 personnel by themselves rather than by management or an outsider. The opportunity to watch
8 videos makes personnel more engaged and aware of their own actions, which is helpful in
9 creating motivation for improvement.

10
11
12
13
14
15
16
17
18
19 The third practice, humour, was used when discussing delicate topics. The study
20 indicates that practitioners driving change should create situations where actors can safely
21 joke and laugh. Personnel can use these situations as safe zones in which to raise difficult
22 issues or problems that might be otherwise be difficult to discuss publicly. Finally, while the
23 piloting of a status board occurred outside the meetings, its implications were discussed and
24 reflected on during the regular development meetings. The status board is an example of a
25 shared material artefact that is at the centre of a practice development. Through this very
26 simple material artefact, sensegiving and sensemaking intertwined into a holistic process of
27 change, offering an opportunity for a practice to develop through discourse and learning. It
28 might be generally useful for practitioners to seek such relatively simple socio-material tools
29 that can facilitate the process of constructing solutions to complex problems.

30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45 The identification of diverse sensemaking practices increases understanding of
46 sensemaking as both a multifaceted phenomenon and a practice that emerges in liaison with
47 material. While the identification of the four sensemaking practices is relevant to the
48 organisational change and sensemaking literature, it would be interesting to analyse these
49 practices and their relation to sensemaking and each other in more detail, and to perhaps
50 identify more sensemaking practices. Overall, more research that approaches sensemaking as
51 a simultaneous, holistic process would be welcome. We need more understanding of how
52
53
54
55
56
57
58
59
60

sensemaking occurs collectively and across organisational boundaries. It would be particularly interesting to understand how socio-materiality is involved in practise development and organisational change in different contexts and fields.

References

- Aiken L.H., Sloane D.M., Bruyneel L., Van den Heede K., Griffiths P., Busse R., Diomidous M., Kinnunen J., Kózka M., Lesaffre E., McHugh M.D., Moreno-Casbas M.T., Rafferty A.M., Schwendimann R., Scott P.A., Tishelman C., van Achterberg T., and Sermeus W. (2014), "Nurse staffing and education and hospital mortality in nine European countries: a retrospective observational study", *The Lancet*, Vol. 383 No. 9931, pp. 1824-30.
- Alameddine M., Baumann A., Laporte A., and Deper, R. (2012), "A narrative review on the effect of economic downturns on the nursing labour market: implications for policy and planning", *Human Resources for Health*, Vol. 10. <https://doi.org/10.1186/1478-4491-10-23>
- Balogun, J., Jacobs, C., Jarzabkowski, P., Mantere, S., and Vaara, E. (2014), "Placing strategy discourse in context: sociomateriality, sensemaking, and power", *Journal of Management Studies*, Vol. 51 No. 2, pp. 175-201.
- Bender, M., Connelly, C.D., and Brown, C. (2013), "Interdisciplinary collaboration: the role of the clinical nurse leader", *Journal of Nursing Management*, Vol. 21 No. 4, pp. 165-74.
- Bertels, S. and Lawrence, T.B. (2016), "Organisational responses to institutional complexity stemming from emerging logics: the role of individuals", *Strategic Organization*, Vol. 14 No. 4, pp. 336-72.
- Brown, A.D., Colville, I., and Pye, A. (2015), "Making sense of sensemaking in organization studies", *Organization Studies*, Vol. 36 No. 2, pp. 265-77.

- 1
2
3 Castel, P. and Friedberg, E. (2010), "Institutional change as an interactive process: the case of
4 the modernization of the French cancer centers", *Organization Science*, Vol. 21 No. 2,
5 pp. 311-30.
6
7
8
9
10 Dyck, L.R., Caron, A., and Aron, D. (2006), "Working on the positive emotional attractor
11 through training in health care", *Journal of Management Development*, Vol. 25 No. 7,
12 pp. 671-88.
13
14
15
16
17 Eisenhardt, K.M. (1989), "Building theories from case study research", *Academy of*
18 *Management Review*, Vol. 14 No. 4, pp. 532-50.
19
20
21 Fairclough, N. (1995), *Critical Discourse Analysis*, Longman, London, UK.
22
23
24 Gioia, D.A. and Thomas, J.B. (1996), "Identity, image, and issue interpretation: sensemaking
25 during strategic change in academia", *Administrative Science Quarterly*, Vol. 41 No. 3,
26 pp. 370-403.
27
28
29
30
31 Glouberman, S. and Mintzberg, H. (2001), "Managing the care of health and the cure of
32 disease - Part I: Differentiation", *Health Care Management Review*, Vol. 26 No. 1, pp.
33 56-69.
34
35
36
37
38 Grant, D. and Marshak, R.J. (2011), "Toward a discourse-centered understanding of
39 organisational change", *Journal of Applied Behavioral Science*, Vol. 47 No. 2, pp. 204-
40 35.
41
42
43
44
45 Gubrium, J.F. and Holstein, J.A. (2009), *Analyzing Narrative Reality*, Sage, Thousand Oaks,
46 CA, USA.
47
48
49 Hardy, C., Lawrence, T.B., and Grant, D. (2005), "Discourse and collaboration: the role of
50 conversation and collective identity", *Academy of Management Review*, Vol. 30 No. 1,
51 pp. 58-77.
52
53
54
55
56
57
58
59
60

- 1
2
3 Helpap, S. and Bekmeier-Feuerhahn, S. (2016), "Employees' emotions in change: advancing
4 the sensemaking approach", *Journal of Organizational Change Management*, Vol. 29
5
6 No. 6, pp. 903-916.
7
8
9
10 Hultin, L. and Mähring, M. (2017), "How practice makes sense in healthcare operations:
11 studying sensemaking as performative, material-discursive practice", *Human Relations*,
12 Vol. 70 No. 5, pp. 566-93.
13
14
15 Jarzabkowski, P.A. and Le, J.K. (2016), "'We have to do this and that? You must be joking':
16 constructing and responding to paradox through humor", *Organization Studies*, Vol. 38
17 No. 3-4, pp. 433-62.
18
19
20
21
22
23
24 Jian, G. (2011), "Articulating circumstance, identity and practice: toward a discursive
25 framework of organisational changing", *Organization*, Vol. 18 No 1, pp. 45-64.
26
27
28
29 Jones, O., Gold, J., and Claxton, J. (2017), "A little less conversation, a little more action:
30 illustrations of the mediated discourse analysis method", *Human Resource*
31
32
33
34
35
36
37 Khan, A.S. (2017) "Institutions and sensemaking of change: Institutional frame switching as
38 sensemaking of microfinance in a Pakistani commercial bank", *Journal of*
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
60 Liff, R. and Andersson, T. (2012), "The multi-professional team as a post NPM control
regime. Can it integrate competing control regimes in healthcare?", *Scandinavian*
Journal of Public Administration, Vol. 16 No. 2, pp. 45-67.

- 1
2
3 Lu, C-K., Huang, Y-C., and Lee, C-J. (2015), "Adaptive guidance system design for the
4 assistive robotic walker", *Neurocomputing*, Vol. 170 No. 25, pp. 152-60.
5
6
7
8 Lüscher, L.S. and Lewis, M.W. (2008), "Organisational change and managerial sensemaking:
9 working through paradox", *Academy of Management Journal*, Vol. 51 No. 2, pp. 221-
10 40.
11
12
13
14 Maitlis, S. and Christianson, M. (2014), "Sensemaking in organizations: taking stock and
15 moving forward", *The Academy of Management Annals*, Vol. 8 No. 1, pp. 57-125.
16
17
18
19 Meyer, R., Höllerer, M., Jancsary, D., and van Leeuwen, T. (2013), "The visual dimension in
20 organizing, organization, and organization research: core ideas, current developments,
21 and promising avenues", *Academy of Management Annals*, Vol. 7 No. 1, pp. 489-555.
22
23
24
25
26 Mills, J.H., Thurlow, A., and Mills, A.J. (2010), "Making sense of sensemaking: the critical
27 sensemaking approach", *Qualitative Research in Organizations and Management: An
28 International Journal*, Vol. 5 No. 2, pp. 182-95.
29
30
31
32
33 Nicolini, D. (2012), *Practice Theory, Work, and Organization: An Introduction*. Oxford
34 University Press, Oxford, UK.
35
36
37
38 Orlikowski, W.J. and Scott, S.V. (2015), "Exploring material-discursive practices", *Journal
39 of Management Studies*, Vol. 52 No. 5, pp. 697-705.
40
41
42
43 Ramanujam, R. and Rousseau, D.M. (2006), "The challenges are organisational not just
44 clinical", *Journal of Organisational Behavior*, Vol. 27 No. 7, pp. 811-27.
45
46
47
48 Rouleau, L. and Balogun, J. (2011), "Middle managers, strategic sensemaking, and discursive
49 competence", *Journal of Management Studies*, Vol. 48 No. 5, pp. 953-83.
50
51
52
53 Schatzki, T.R. (2001), "Introduction: practice theory", in Schatzki, T.R., Knorr Cetina, K.,
54 and von Savigny, E. (Eds.), *The Practice Turn in Contemporary Theory*, Routledge,
55 London, UK, pp. 1-16.
56
57
58
59
60

- 1
2
3 Schreyögg, G. and Sydow, J. (2011), "Organisational path dependence: a process view",
4
5 *Organization Studies*, Vol. 32 No. 3, pp. 321-35.
6
7
8 Scollon, R. (2001), "Discourse analysis and the problem of social action", in Wodak, R. and
9
10 Meyer, M. (Eds.), *Methods of Critical Discourse Analysis*, Sage, London, UK, pp. 139-
11
12 96.
13
14
15 Sonenshein, S. (2010), "'We're changing – or are we?' Untangling the role of progressive,
16
17 regressive, and stability narratives during strategic change implementation", *Academy*
18
19 *of Management Journal*, Vol. 53 No. 3, pp. 477-512.
20
21
22 Steigenberger, N. (2015), "Emotions in sensemaking: a change management perspective",
23
24 *Journal of Organizational Change Management*, Vol. 28 No. 3, pp. 432-451.
25
26
27 Swensen, S., Gorringer, G, Caviness, J., and Peters, D. (2016), "Leadership by design:
28
29 intentional organization development of physician leaders", *Journal of Management*
30
31 *Development*, Vol. 35 No. 4, pp. 549-70.
32
33
34 Vaara, E., Sonenshein, S., and Boje, D. (2016), "Narratives as sources of stability and change
35
36 in organizations: approaches and directions for future research", *The Academy of*
37
38 *Management Annals*, Vol. 10 No. 1, pp. 495-560.
39
40
41 Weber, K. and Glynn, M.A. (2006), "Making sense with institutions: context, thought and
42
43 action in Karl Weick's theory", *Organization Studies*, Vol. 27 No. 11, pp. 1639-60.
44
45 Weick, K.E. (1995), *Sensemaking in Organizations*, Sage, London, UK.
46
47
48 Yin, R.K. (2003), *Case Study Research: Design and Methods*, Sage, Thousand Oaks, CA,
49
50 USA.
51
52
53
54
55
56
57
58
59
60

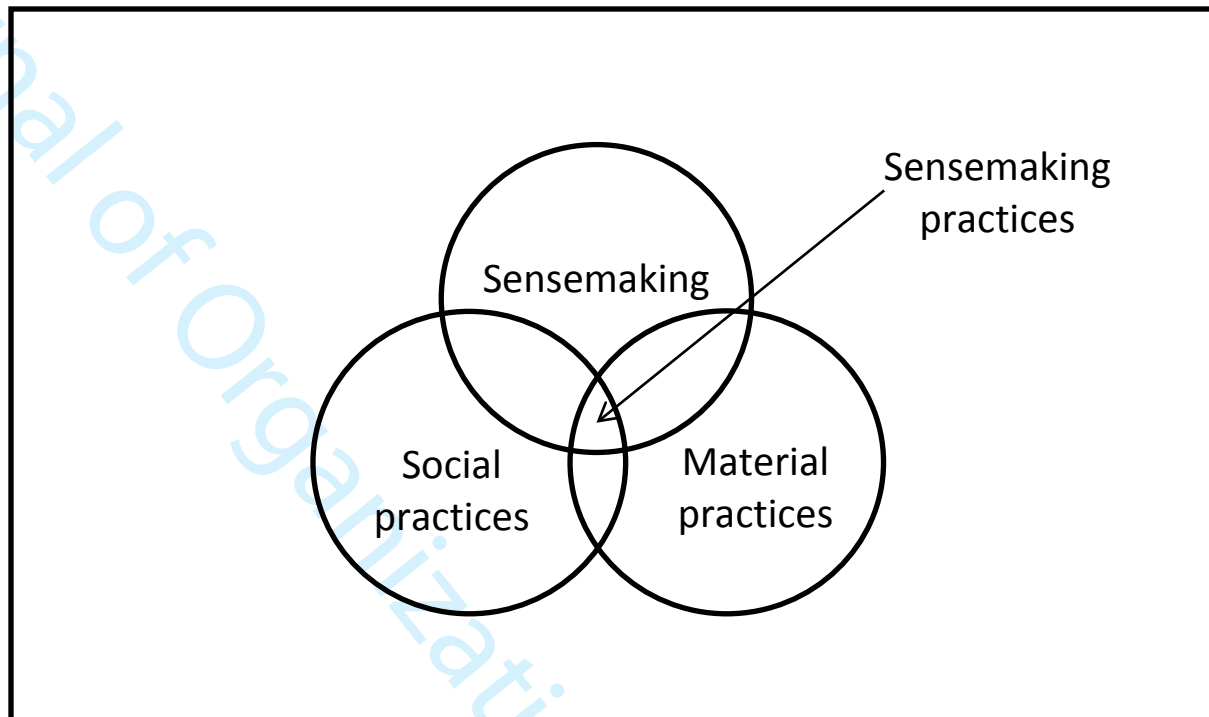


Figure 1. The nexus of sensemaking practices.

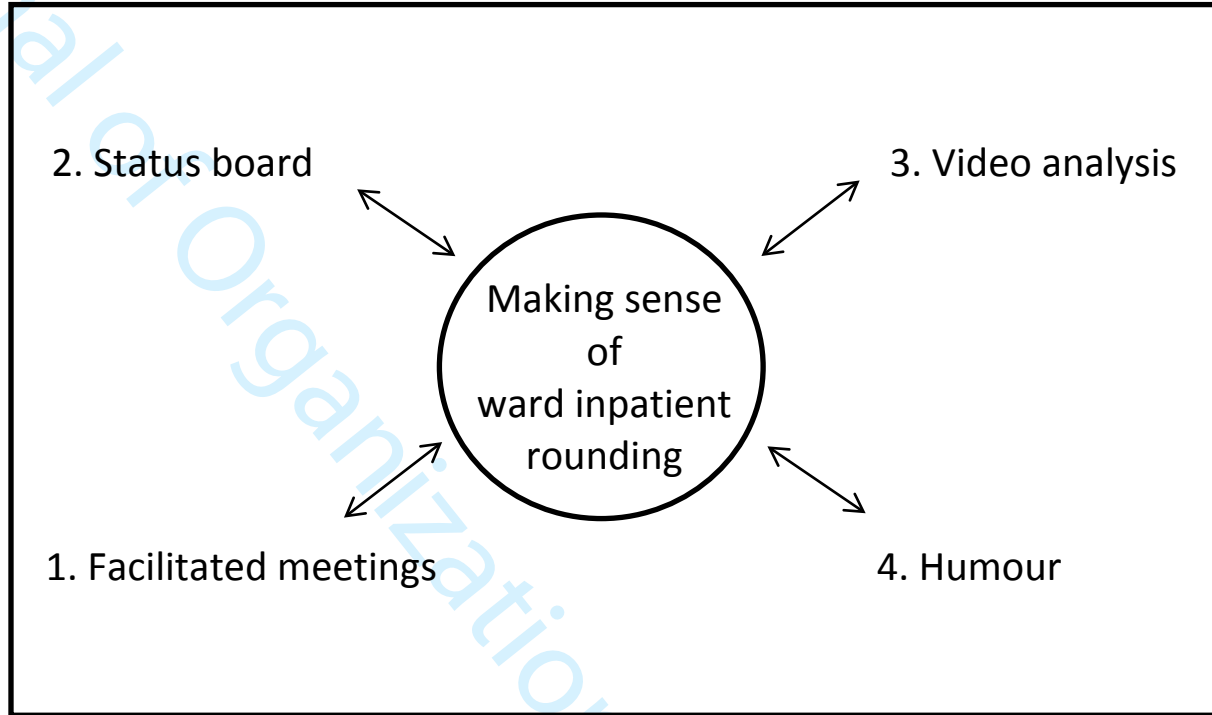


Figure 2. The four sensemaking practices identified in the study.


Emerald Emerging Markets Case Studies
 Emerald Group Publishing Limited
 Howard House
 Wagon Lane
 Bingley
 West Yorkshire
 BD16 1WA

Consent to publish- Release form

Title of Case study	<i>Sensemaking emerging through socio-material practices</i>
Author	<i>Jansson, Lunkko, Suhonen, Meriläinen, Wiik</i>

I hereby confirm that I have reviewed the above-entitled case study in full and on behalf of the organisation in question, I provide my full permission for the case to be published in its entirety for the life of the work in all languages and all formats by Emerald Group Publishing for commercial distribution.

By signing this form, I warrant that I am authorised to grant full permission.

Name	<i>Heikki Wiik</i>
Position	<i>Chief Medical Officer</i>
Address	<i>Kojonintie 50 90220 OYS . FINLAND</i>
Organisation	<i>Department of Surgery Oulu University Hospital</i>
Email	<i>heikki.wiik@oulu.fi</i>
Signed	
Date reviewed & signed	<i>10.4.2019</i>