

Basic Structures for a New Theory of *Samhandling* Under Risk (SUR) – A Model

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Abstract: This final chapter aggregates experiences and findings from the other chapters of the book. The book's overall research question is as follows: *What are the basic structures of the concept of samhandling under risk and how can samhandling be created when the conditions are unpredictable?* A number of SUR (*Samhandling* Under Risk) structures are derived based on semantic theory construction, and these are described in an overall definition and visualized in a model, which in turn can form the basis of a SUR theory. These are organized under educational, organizational and operational structures, as three superior competencies needed to facilitate effective SUR. The essence is that there is a different basis for this type of assessment than with traditional risk analysis, in order to achieve good *samhandling* under risk and unforeseen conditions. This is concerned with what is needed when little or nothing goes according to plan. It is then necessary to emphasize on such matters more in depth and addition address other factors to achieve SUR through *samhandling* where the conditions are predictable - where completed plans and clear objectives work. For the learning level, valuation of inaccurate knowledge and qualities is required to extract information from the disorder. For the organizational level, it is important to create and/or maintain shared leadership and at the operative level, improvisation is essential. When working with a SUR paradigm, one must be able to accept unclear goals, be prepared to lose control and create room for surprises. Leaders with SUR skills will be required to prepare

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organizations for this. Training and SUR should be incorporated into strategic plans, management training and leadership development. An expansion of established pedagogical models is also needed to achieve this aim. Invisible learning is one approach. *Samhandling* does not simply happen in a vacuum, and the chapter encourages further SUR research in a global perspective, where different languages and cultures can contribute to enhanced understanding of SUR issues. As a starting point for such an approach, we explore how the term is expressed in the Japanese language. A more global approach to SUR structures can contribute to a deeper understanding of what is needed, to avoid unwanted misunderstandings and crises, learn from each other and solve complex and unforeseen situations through *samhandling*.

Keywords: *Samhandling*, interaction, SUR, semantic model, training, strategy, global understanding, organizational learning, unforeseen.

Introduction

In this anthology, it is argued that *samhandling* plays a key role in meeting the unforeseen, as a capacity in predicting the unforeseen, during an impact and in the aftermath of an incident. This is very evident and presented in detail in Chapter 14 (Steiro & Torgersen, 2018). The core is, however, that in particular the study of Torgersen & Steiro (2009) and the majority of studies we have undergone have examined collaborative processes under predictable conditions without the risk of material, personnel or values, and related to work processes where the goals have been clear and unambiguous. In other words, unforeseen events have not been studied as part of the conditions in which *samhandling* has taken place. In the present anthology, however, we have focused on *samhandling* under risk and unforeseen conditions.

The overall and fundamental research question we have asked is: *What are the basic structures of the concept of samhandling under risk and how can samhandling be created when the conditions are unpredictable? Or more concentrated: What should be emphasized in order to achieve samhandling under risk and unpredictable conditions (SUR)?* (see Chapter 1). In other words, this question implies how the traditional underlying processes of *samhandling* (cf. the 15 indicators given in Chapter 2) behave during risk and whether there are other conditions that are important under such conditions especially for organizations such as emergency services and armed forces.

Nevertheless, it is essential for us to point out the following: *Samhandling Under Risk* (SUR) focuses on competence levels and strategic approaches for what should be emphasized *in addition* to basic competencies and basic capabilities (Torgersen, 2015) to interact under unpredictable conditions. Here, the level of competence is important regarding individual, group and the organizational level. In our perspective, the competence consist of both explicit and tacit knowledge. On the organizational level competence on tactical, operational and strategic/ play an important factor and the interplay between the different organizational levels. There is no doubt that basic capabilities and conditions, must be at the bottom for effective *samhandling* and coping with unforeseen events. i.e.;

- experience with past events;
- clear communications;
- coordination;
- best possible common situation awareness;
- theoretical and practical competence about events and exercises;
- drilling of known and necessary procedures;
- availability and coping of necessary equipment

The same applies to the satisfaction and performance of the underlying processes (the 15 indicators, or structures) for *samhandling* (Torgersen & Steiro, 2009, see also chapter 2 of the present book, Torgersen & Steiro, 2018), if one wishes *samhandling* at a high level of ambition and which differs from “cooperation” and only “communication.” In the vast majority of events, it is also sufficient to have basic capabilities in place and focus on *samhandling* at a low to medium ambition level. Under such conditions, it will also be possible and sufficient to develop and use clear goals for both competence development and evaluation (i.e. SMART goals) in planning, implementation and evaluation of exercises.

However, the research contributions in this anthology have demonstrated that this low-level ambition is insufficient when the conditions are unpredictable and the situation involves risk. In that case, competence for and emphasis on *other underlying processes*, in order to extract the effect of such *samhandling* processes (at a high ambition level). These are the underlying processes we denote «SUR structures», and as we will clarify in this chapter.

Identifying and defining SUR structures

We have used the semantic view of theories and theory construction STC (Kvernbekk, 2005; Giere, 1988; Suppe, 1989; van Fraassen, 1988) as the principle and method to identify underlying processes for SUR. STC is a meta theory, which describes the constituents of data as the basis for models, theories and related key concepts. STC is a theoretical meta study based on both empirical and theoretical sources, in this case the chapters of the book.

Semantic theory construction (STC)

The essence of STC is that a theory consists of, or is built up by several selected models and associated concepts. This in turn relies on a selection of collected data, both empirical and in-house. At all stages of such a model and theory building, professional and meaningful (semantic) assessments are conducted as a basis for selection and construction. Similarly, we have examined all chapters in this anthology and drawn up key approaches and concepts (basic structures). This process have been responsible for the main message in the chapters, and relates to basic processes that have been derived and/or discussed. These foundations have been emphasized as the most important for *samhandling* at risk and the unforeseen, related to the various themes and academic approaches in the various chapters and main parts.

Based on this, we have further consolidated and concentrated the various basic processes, and aggregated these terms (structures), and expressed this in combined theses for the three main parts of the book. The individual authors have also contributed to the quality assurance of the various joints and semantic aggregation processes, among which they have proposed adjustments and agreed to recognize their main messages in the aggregated and generalized formulations and concepts. Having said that, such aggregated and semantically derived formulations and models will not be able to capture and express the actual nuances and detailed findings found in the individual studies. To achieve this, the individual chapters must be studied. However, it is emphasized that our chapter is an independent contribution, and the

other chapter authors are not assigned any responsibility for the content of this chapter.

SUR-structures and models

The purpose of such general model statements, on the other hand, is to express overall opinion and ideas on the main findings in general. Findings can be used, under the mentioned conditions, for further theoretical building and empiric studies, and as principles in both strategical and practical approaches for managers, stakeholders and others in their efforts to develop competence for SUR, adapted to their own organization and situation. Table 28.1 shows the main findings from the STC work with selected SUR-structures (see also Figure 28.1, p. 527).

Further, we have summarized and aggregated these structures into an overall definitions or verbal models for SUR related to each academic approach represented in the anthology (Table 28.2).

Table 28.1 Overview of some identified SUR-structures from the different parts of the anthology.

Part in this anthology/ Academic Approach	Identified and selected SUR-structures, alphabetic range (from the chapters in the part)
1 Educational samhandling structures (under risk) - EdSUR	<ul style="list-style-type: none"> ▪ <i>Concurrent learning and framing of objectives and measures</i> ▪ <i>Extract knowledge out from disorder in information and surroundings</i> ▪ <i>Take into account the moods</i> ▪ <i>The value of not precise knowing</i> <p>...</p>
2 Organizational samhandling structures (under risk) - OrgSUR	<ul style="list-style-type: none"> ▪ <i>Cultural awareness in and between organizations</i> ▪ <i>Knowledge of different leadership styles and organizational hierarchies between interaction organizations</i> ▪ <i>Social support</i> ▪ <i>Shared leadership</i> ▪ <i>The avoidance of organizational narcissism</i> ▪ <i>Trust</i> <p>...</p>
3 Operational samhandling structures (under risk) - OpSUR	<ul style="list-style-type: none"> ▪ <i>«Auftragstaktik» (Mission command)</i> ▪ <i>Collective acceptance for swift trust, loss of control and flow by chaos</i> ▪ <i>Competence exchanging</i> ▪ <i>Creating room for surprise</i> ▪ <i>Faith of mastering</i> ▪ <i>Skills in improvisation</i> ▪ <i>Utilization of sequential, parallel and synchronous interaction</i> <p>...</p>

Table 28.2 Fundamental structures of a basic model for SUR.

Part in this anthology/ Academic Approach	Constructed thesis/Verbal basic models
1 Educational <i>samhandling</i> structures (under risk) - EdSUR	<i>SUR-oriented learning structures implies an emphasize the value of not precise knowing, development for concurrent learning and framing of objectives and possible measures during the situations, taking into account the moods, and in fellowship extract knowledge out from disorder in information and surroundings.</i>
2 Organizational <i>samhandling</i> structures (under risk) - OrgSUR	<i>SUR-oriented organization and leadership structures implies an emphasize of social support, shared leadership, cultural awareness and trust in and between organizations and stakeholders, knowledge of different leadership styles and organizational hierarchies between interacting organizations, and the avoidance of organizational narcissism (culture).</i>
3 Operational <i>samhandling</i> structures (under risk) - OpSUR	<i>SUR-oriented operational structures implies an emphasize on faith of mastering, «Auftragstaktik» and improvisational skills, competence exchange and collective acceptance for swift trust, loss of control, flow by chaos and creating room for surprise, and utilization of sequential, parallel and synchronous interaction.</i>

With these structures as a basis, the following general definition is introduced regarding SUR:

Samhandling Under Risk (SUR) implies an emphasis on specific educational, organizational and operational structures, and these structures can have different importance for the effectiveness of *samhandling* in order to master challenges in the phases of warning signs, incident moment and recovery (cf. the Bow tie model presented at the start of the anthology).

The definition above states that it is necessary to emphasize some other basic processes to achieve *samhandling* under risk and unforeseen conditions, than in normal situations without risk. However, it does not mean that current processes which are necessary in normal situations (the 15 indicators introduced in Torgersen & Steiro, 2009) can be forgotten or downgraded. These must be the foundations. In other words, SUR-structures function as an addition or supplement, but necessary to achieve effective *samhandling* in the meetings with risk. At the same time, the shades and emphasis of the structure will have to be adapted to the situation and to what tasks the *samhandling* will support. For example, different

phases in the Bow-tie model could require emphasis on different SUR-structures, both in general and depending on the situation and context.

Organization structure and importance for *samhandling*

The SUR-structures can be seen as similar to those found in other research focusing on flexible organizations in general. Decades of research have found that organizations, to be successful, must be both structured and flexible (Faraj & Xiao, 2006; Weick, Sutcliffe, & Obstfeld, 1999; Kettl, 1983). The ideal in both cases would resemble the successful self-organizing firms that Brown & Eisenhardt (1997) found in the computer industry and was argued would be valuable for other organizations as well. We also believe this is of great importance in particular for emergency services and armed forces.

Successful firms did not rely on either a purely mechanistic or purely organic process or structure. Instead, successful firms had well-defined managerial responsibilities and clear project priorities while also allowing the design processes to be highly flexible, improvisational, and continuously changing. In this anthology, we have looked in depth on what structures are necessary based on what we have seen. We denote that organizations in order to be successful in meeting with the unforeseen; three elements should be taken into account; the educational structure, the organizational structure and operational structure. These three elements should be aligned, assessed and be the subject of continuous development. Demands in operational structures, cannot be seen without looking to the educational and the organizational structure and the other way around.

In order to succeed with adaptation to the surroundings, leaders needs to interpret and communicate the conditions their organization stand in an appropriate manner, and take necessary measures. The leadership commitment is often seen as the most crucial point in change management (Selznick, 2011, 1957; French, Bell & Zawacki, 1990; Torgersen & Steiro, 2009; Steiro, 2015). Top management commitment is also found to be the

most important factor with regards to safety management (Hopkins, 2008; Rosness et al., 2004; Kjellén, 2000).

SUR, leadership and culture

From our point of view, it is important to clarify that an adequate focus on SUR structures in an organization, may in many organizations, require leadership to reach insight in the basic frameworks. This includes the understanding of both the nuances of the concept and the prerequisites.

Social support, both from colleagues and leaders, is of great importance for SUR. Leaders play further a crucial role to make sure that the basic competence is in place regarding i.e. emergency preparedness planning, exercises and enable material and resources to be available. SUR-theory (Figure 28.1) is of limited value if only the single individuals base their actions on such insights. Not least, the leadership skills and roles of SUR will also be necessary to avoid the development of unfortunate organizational culture, such as “organizational narcissism” (Schultz & Hatch, 2002), which can hinder involvement and competency internally and between organizations and other competence environments than itself and its own profession and culture (see also chapter 16, Heier, 2018). Cross-sector *samhandling* requires organizational knowledge and understanding, and the willingness to adapt between the players in order for the interaction to be effective. It can affect both actual and experienced learning outcomes, both internally in the individual sector, and the more general cross-sector learning, of both exercises and crisis management.

The SUR thinking should therefore permeate the entire organization at all levels. To achieve this, a clear knowledge-based leadership can be one of several measures. Such leadership and knowledge flow will also be necessary between organizations. In this way, different organizations can develop experiences with SUR, both internally and between different organizations (emergency services and/ or armed forces) when such inter-organization is required, for example, in major crises and incidents in society.

A concise theory of SUR

In summary, figure 28.1 shows an overall theory model for SUR based on central main findings in this anthology

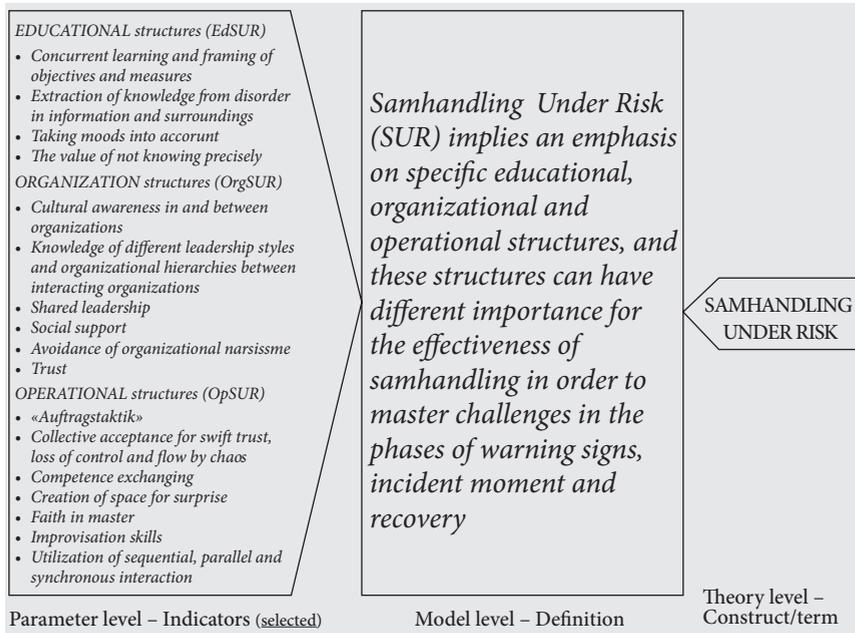


Figure 28.1 SUR-theory: A theoretical assembly model of *samhandling* under risk (SUR), under parameter level (selected from this anthology), model level with main definition and conceptual framework (SUR).

All these factors (in parameter level, Figure 28.1) must be seen in relation to each other and be seen as interdependent. We can illustrate this theoretical and organizational interplay. Looking into the development of the armies between 1930–1945, The US Armed Forces and the German Army had a different interpretations of the “Preussian thoughts and principles” (Muth, 2012; Chapter 25, Krabberød & Jacobsen, 2018). While the German officers were encouraged to come up with solutions. The US officer cadets were searching for the The Military Academy’s answer, which is in pedagogical terms often called “the school’s answer”, implying that something is either right or wrong, there is always an answer, you just have to find it. In difference from the German officers, American cadets were not accustomed to such an approach at the start. The US Military

wanted to adopt to structures like the German “auftragstaktik”, but did not recognize that the pedagogic had to change accordingly (Muth, 2012). However, this is a historical example and the US Military changed to a system quite similar and can be seen in the forefront in this field (Albert & Hayes, 2003). Nyhus, Steiro and Torgersen (2018) in Chapter 6 discuss the importance of the instructors’ role in facilitating a learning environment that is suited for training for the unforeseen and find that instructors role may differ within the same academy and producing differences both in outcome and process.

Pedagogic use of learning for SUR

It is insufficient that managers and employees only know the SUR-structures. The SUR structures and the foundation on which these are based should actively blend with the organization’s strategic management plans, curricula’s, and manuals and guidance documents for planning, implementation and evaluation of training plans and exercises. It is necessary that this is a leadership responsibility to make it happen. Thus, SUR competencies will be a part of the leadership role and leadership skills, as much as with employees with executive roles. However, such competence must be developed and trained continuously over time. SUR-oriented view of learning must also cover more organizational levels, both individual, group, organization and cross-sectoral approaches. Even cross cultural and global approaches may be necessary (Kawamura & Nonaka, 2016). It is a continuous and integrated whole in knowledge development, a form of synergy (von Krogh et al., 2000). Our perspective on “learning” in this context is pedagogical use of learning (didactic), i.e. learning through educational intervention. This means systematic planning, implementation (execution) and evaluation of SUR-oriented learning through teaching and training. In addition to this, process-oriented organizational learning will take place, but such models have a more general and less direct intervening approach to the learning process, e.g. SECI model of knowledge dimensions (Nonaka, 1990; Nonaka et al., 2000), see more in Chapter 1, Torgersen, 2018). However, central focus is on both tacit and

explicit knowledge (Polanyi, 1958). For SUR, we believe that learning of tactical knowledge can be particularly important and it constitutes an educational problem. Established educational models have essentially explicit knowledge as a starting point.

SUR-based didactic approach

It is not sufficient that managers and employees only know the SUR structures. In order to continuously develop such competence, it is necessary to emphasize the EdSUR structures in all types of training. In particular for leadership education related to risk organizations. However, such competence development must be both planned and implemented in practice, with specially adapted exercises. In addition, in order to do that, the use of extended didactic models is needed (Torgersen, Steiro & Saeverot, 2015). Adjusted learning perspectives and strategic planning tools are needed for both education and concrete training programs (see also Chapter 18, Magnussen, 2018). Torgersen (2015) also showed that traditional planning models for training, training and exercises were insufficient to cover competence development in unforeseen events

SUR-oriented view of learning

Although modern education and learning are extensive and consist of many different perspectives, there are certain trends. One such trend is the so-called visible-learning paradigm. Since the release of the book "*Visible learning – A Synthesis of Over 800 Meta-Analyses Relating to Achievement*" in 2009 the New Zealand researcher John Hattie has had a huge impact on Western education, in particular for education in schools, but also in general for all types education and training. Although Hattie's book consists of an impressive empirical material, he also finds support from certain theoretical assumptions on what learning and teaching signify. One of Hattie's projects is therefore to develop a theory of what good teaching might be (Hattie, 2009). Central to his visible-learning paradigm we find *direct instruction*. This theory involves a clear and defined learning content with clear learning goals, so that the message is conveyed as

directly and clearly as possible, for example through verbal instruction and demonstrations (cf. explicit knowledge). As for the learners, they can experience what is to be learned without disturbance or interference. Such visible learning can also be easier “measured” and evaluated. Tenyson & Foshay (2000) point to similar models for learning and training in different kinds of organizations, for example different use of goal attainment models. We do not doubt that visible learning may be good methods for learning and training, regarding basic capabilities and perhaps some *samhandling* structures under predictable and safe conditions. However, there are obviously a number of aspects that are not thematized within the visible learning paradigm, for example, the unforeseen, existential and ethical aspects, creativity, autonomy and critical dimensions (cf. tactic knowledge).

Invisible learning

In order to educate for *samhandling* structures under risk and unpredictable conditions, other educational approaches are therefore needed. Such aspects do require an indirect or, what we call *invisible approach* as they do not contain general or objective truths. Torgersen & Saeverot (2015) developed a didactic planning model to train for unforeseen events. Central to this model was that learning goals, which naturally were not known or apparent under such conditions, had to be replaced by other and more generic competence objectives, including improvisation. This model also emphasizes indirect training methods. To build expertise for SUR, Torgersen and Saeverot (2015) discovered that such an approach will be more appropriate than visible learning methods.

Because of the ongoing impact of the visible-learning paradigm in Western education and training, what we term invisible education/learning and indirect pedagogy (Saeverot, 2013; 2018), runs the risk of being marginalized. In terms of practical pedagogy and management, there are many forms of invisible education. Take for example the instructor or leader who praises one of the operators or students publicly because he has done a good job at an exercise. Such a kind of public praise corresponds to an indirect appeal to the other operators to follow the footsteps

of the acclaimed operator. The leader or instructor has been indirect in two ways. First, by communicating through one of the operators, instead of communicating directly to the whole group. However, such indirect forms of communication often work poorly in the long run, as operators can easily reveal such strategies. This is also related to the fact that the above-mentioned strategy is invisible, yet restrictive, as it is relatively obvious what the manager's intention with this kind of praise is. Another possibility is that leaders can seek to find new and more advanced forms of invisible and indirect actions. Perhaps these leaders should invent new forms of indirect communication forms, while sharpening the awareness about these forms, to make it easier to ward off any manipulations?

Another example is concurrent learning, as previously described (Chapter, 14, Steiro & Torgersen, 2018). Concurrent learning is important to build expertise for SUR, focusing not only on the individual's learning or unique expertise, but also that the learning process occurs jointly and that each other's uniqueness gives strength to the whole (cf. "ba" (場)). What is interesting is that the concept of concurrent learning corresponds to the "three arms" symbol of the Japanese expression «kyō (協)». Such learning needs to be achieved by raising the awareness of all involved. However, in order to train on this, it is not possible to produce detailed learning goals or individual sub-processes that are needed to achieve good concurrent learning. The reason being that such a learning process will be continuous and thus not have a final goal of the learning outcome. The training on concurrent learning can therefore best be done with invisible approaches, even if supplemented by direct methods where possible.

Almost all forms of instruction and learning are more or less invisible and indirect. Hence, it is more a question of different degrees of invisible instruction and learning (cf. the concept of "Degrees of unforeseen" in Torgersen & Saeverot, 2015). At the core of the degrees of invisible instruction is that both the learning content, work tasks, problems and solutions, as well as whoever is going to work on the challenge, is unclear when the exercise or training starts.

In other words, the information is not only unclear, but also missing. During the learning process, the amount of information may increase, but not necessarily the clarity. Thus, one goal being to train the participants

to find ways to interact, whilst finding both goals and solutions together. In addition, such training will exert both the acceptance and the ability to make decisions based on such information, including decisions on dilemmas under pressure based on unclear information. Such decisions can be seen separately and as part of the process of *samhandling*. This can be seen as a basis for choosing appropriate measures and solutions along the way, often in successive ranges depending on whether or not the decisions and measures work, how long they give the desired effect and the extent to which new other unforeseen events occur. Such invisible methods should be introduced and trained with gradually increasing “cloudiness”.

Towards *samhandling* in global SUR commitment

In essence, as we also suggested in connection with educational approaches for SUR, our perspective has largely been rooted in a western cultural and linguistic point of view. Thus, based on our overall basic research question, another question will also appear: *How do other cultures and languages perceive the phrase “SUR”?* Professor Einar Thorsrud had similar approaches and experiences when his concept of partially autonomous team and participation was adopted by the Japanese from the 1960s and beyond and used as an essential component of Total Quality Management, largely adopted by Edward Deming (Fischer & Sortland, 2001).

Japanese expressions of *samhandling* under risk

As a prerequisite for further SUR research in a more global perspective, we have considered Japanese expressions of *samhandling* under risk. Given the definition of the Norwegian term, *samhandling*, there are several candidates in the Japanese language. After examining the connotation of each word, the best Japanese word to convey the meaning of *samhandling*, as used in this anthology will be identified below.

First of all, the Japanese word “*sōgo-sayō* (相互作用)” seems to be a good choice. This word means “interaction,” that connotes a series of actions

by actor A and reactions by actor B or some other actors. However, the word does not have connotation of “collaboration” or “working together” to achieve “common goals.” Simple meaning of “interaction” or “series of actions and reactions” would not be a good choice for translation.

Another Japanese word for “interaction” in English is “*sōgo-kōi* (相互行為).” The Japanese word “*kōi*” means “act” or “action.” Being almost synonymous to the word “*sōgo sayō* (相互作用),” it lacks meaning of “working together” or “collaboration” to achieve a shared goal. Both “*sōgo-sayō* (相互作用)” and “*sōgo-kōi* (相互行為)” have no hidden assumption of relationship of actors with mutual trust or equal and complementary partnership.

When we look for Japanese words for the English word of “cooperation,” “*kyōryoku* (協力)” and “*kyōdō* (協同)” are listed in the English-Japanese dictionary. The left part of ideogram, “*kyō* (協)” (which we briefly presented above, in connection to concurrent learning), consists of a symbol of “multiple (or many)” and the right part of the symbol signifies “three arms (helping hands),” meaning “working together.” The Kanji characters “*ryoku* (力)” and “*dō* (同)” mean “power” and “same/equal/meet/put together” respectively. Thus, “*kyōryoku* (協力)” connotes to “work together toward common goal,” and “*kyōdō* (協同)” also has connotation of “working together or collaboration in order to achieve a shared goal.” Another Japanese word with the same pronunciation, “*kyōdō* (共同)” also implies “two or more people work together” on an equal basis, or sometimes it simply means “common/shared” as in “common cemetery.”

In addition, there exists another Japanese word with the same pronunciation: “*kyōdō* (協働).” This word has rather special connotation. Compared to the other two Japanese words, “*kyōdō* (協同)” and “*kyōdō* (共同),” this heterography conveys deeper meaning. The second part of the word, “*dō* (働)” means “work.” Literal meaning of “*kyōdō* (協働)” is simply “work in cooperation.” However, the concept assumes collaboration among diverse actors. Whereas “*kyōdō* (協同)” presumes more or less equal partnership with clear sense of division of labor or roles to play, “*kyōdō* (協働)” implies ad hoc collaboration among various actors with different skills and expertise.

In fact, the word “*kyōdō* (協働)” was used for translation of “co-production” in English, when the academic concept was introduced to Japan

in 1990's. The idea of “co-production” was first developed by Elinor Ostrom and other scholars at Indiana University in late 1970's in the field of public administration (Ostrom, et al., 1978; Alford 2013; Pestoff, 2013). The original concept of “co-production” presupposes collaboration between government and citizens, or producer and consumer of public service¹. The argument for “co-production” eventually led to a new theory of service-dominant approach in the field of public service management, namely “New Public Governance” with increased participation by not only individual citizens but also by civil society organizations (Pestoff, 2013:384). The concept also presupposes mutual trust and voluntary commitment among the actors. In such a perspective, can therefore, “*kyōdō* (協働)” be the best Japanese word equivalent to the Norwegian concept of *Samhandling*.

If we understand the concept of *Samhandling* as “*kyōdō* (協働)” or “co-production or collaboration by diverse actors” with ad hoc or improvised division of labor based on each actor's own merit or competence, it will be of the utmost importance in a risk situation, such as an earthquake or war of unimaginable scale with unexpected disaster.

The Japanese word, “*fusoku no jitai* (不測の事態)” means “unexpected/unpredictable situation,” or “contingency” in English. The word “*fusoku* (不測)” signifies a situation or incident that is not “expected” (*yoki* 予期) or cannot be predicted (*yosoku* 予測), in other words, unpredictable or unexpected.

SUR and “ba”

Unexpected situation would not occur in vacuum. It takes place in a certain socio-cultural context. This context can be called “*ba*(場)”, that is “a shared context in motion,” and in which “knowledge is shared, created, and utilized.” “Ba” can be physical, virtual, mental space, or any combination of them. The key concept in understanding “*ba*” is “interaction” since “*ba*” is where knowledge creation takes places as dynamic human

1 In Japanese, “*kan-min kyōdō* (官民協働)” means “collaboration or co-production by public and private sectors.”

processes (Nonaka, Toyama & Konno, 2000:14). “Ba” can also embrace different and interacting levels (individual, group, organization and cross organization/ culture. Continuous knowledge creation is required human process for organizational innovation. *Samhandling* is a Norwegian concept for human process of knowledge creation which will be accelerated and energized within a specific *ba* in an unexpected risk situation.

Conclusion and the way forward

A traditional view to the unforeseen has been that there is always something unplanned, unexpected or unforeseen that happens, and it is impossible to build competence and prepare for every possibilities. But, based on the studies in the present anthology and the developed SUR structures, we believe that there are still opportunities to approach some solutions and measures. However, it requires a different basic view of thinking, for risk analysis and unpredictable events – in addition to the traditional approaches. Overall, we see *samhandling*, at high ambition level, as essential for meeting the unforeseen. It is by no means the full answer, but as we see it, a valuable contributor. *Samhandling Under risk (SUR)* is both dependent of educational (EdSUR), organizational (OpSUR) and operational (OpSUR) structures.

The key point is that top leadership sets the frames of operation, and the actors in the sharp ends finds out how to execute. This means that all levels in an organizations are important but in different ways. Our concluding assumption is that decentralization and flexibility is essential in meeting the unforeseen. In order to achieve effective SUR, it is essential that *samhandlende* organizations know and accept each other’s organizational structure and culture – more than they are structurally similar. In that sense, we need leadership as enablers for this to happen. The SUR-thinking, as stated in this anthology, and summarized in the SUR model, should be used as part of strategic plans, action plans and plans for specific education and exercises on the basis of preparedness and leadership in almost all organizations and in particular for emergency services and armed forces. To develop robust SUR competence, new educational and training models is needed and one approach might be invisible learning approach.

Unforeseen events can hit everyone in society and therefore, also to be focused on a political level, both nationally and globally. Our approach to SUR, including the comparison with how other countries and cultures relate to SUR, also show so far that it could be the basis for developing a more global approach to the SUR structures. We believe that it can contribute to a deeper understanding of what is needed to avoid unwanted misunderstandings and crises, and not least how different countries and cultures can learn from each other and solve situations through *samhandling*.

Samhandling does not simply happen in a vacuum.

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