Using the Umbrella Movement in Hong Kong as an illustrative case study on the relationship-managing organization (RMO) notion in Soft Systems Thinking

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Abstract:

　　Underlying the Soft Systems Thinking (SST) is the notion of an organization which seeks to maintain relationship among its stakeholders (thus called the relationship-managing organization (RMO) notion in this paper). This RMO notion is closely related to other SST-based notions in the systems literature. Study of these closely related notions can be difficult as they are abstract but they are important for learning SST. This paper makes use of the Umbrella Movement (UM) in Hong Kong as an example to illustrate this set of notions on the topic of an organization so as to make them firmly grounded on real-world practices. Such an exercise of clarification serves the aims of (i) making further theoretical development on this set of notions and (ii) providing study materials for teaching this set of conceptual notions. The Umbrella Movement, as a case study, is examined using primary and secondary data from Internet search, newspaper articles, personal field visits to one of its protest sites, and a recent Facebook-based questionnaire survey conducted by the writer. Overall, the research findings from the writer confirm the analytical value of the RMO notion in the UM case study but also expose its perceptual blind spots. The UM case study is shown to offer rich illustrations on the RMO notion. Finally, the paper encourages the adoption of a broad array of notions of organizations, other than the one based on SST, to promote a more comprehensive, critical and

creative way to examine problems in the social domain, including those in business management.

Key words: Soft Systems Thinking; Soft Systems Methodologies; The relationship-managing organization (RMO) notion; The Umbrella Movement; Facebook-based questionnaire survey; Newspaper articles study

Introduction

In Soft Systems Thinking, a major strand of contemporary systems thinking, the underlying notion of an organization is vital for its understanding. There have been conceptual elaborations by Checkland as well as other systems theorists on this notion. Nevertheless, it is also necessary to clarify and operationalize this notion in SST via illustrative case studies. Case studies also serve as a route to make theoretical elaboration on this notion. In this paper, the writer makes use of the recent Umbrella Movement in Hong Kong to achieve these goals.

The notion of an organization and its associated concepts in Soft Systems Thinking

The fundamental views underlying Soft Systems Thinking (SST) are that (i) the real-world is problematic, (ii) systems concepts can be employed to model and clarify insightful viewpoints from specific stakeholder(s), and (iii) discussion and debates with systems models of insightful viewpoints (i.e., the conceptual models) are encouraged among stakeholders[1] to facilitate collective learning (Checkland, 1984; Checkland and

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[1] *Stakeholders* are those concerned parties or parties with vested interests in an organization and/or its policy. Specifically, they are able to affect or are affected "by the achievement of the organization's objectives" (Spinello, 1997) and by the organization's actions and policies (Fleisher and Bensoussan, 2003).

Scholes, 1990). SST and methodologies based on SST (i.e., soft systems methodologies (SSM).) have been argued to be good at tackling problematic situations whereas there are disagreements between stakeholders on what to do to cope with the problematic situation facing them and that there are many interacting factors involved (Jackson, 2000, Ch. 7). The systems literature on SST and SSM is substantial, thus not further described here. Instead, this paper chooses to focus on the clarification and operationalization of the notion of an organization and its related concepts in SST as its main aim.

To start with, Checkland and Holwell (1998) distinguish between the concept of an organization in hard systems thinking (HST) and that in soft systems thinking (SST) as follows:

HST: "an organization is a social entity which sets up and seeks to achieve goals".

SST: "an organization is a social entity which seeks to manage relationships". It is also called a relationship-managing organization (RMO) here.

With strong focus on relationship management with diverse stakeholder groups, the SST notion of an RMO could learn from the business management subjects of (i) Intellectual Capital Management (e.g., Abeysekera (2005) and Cuganesan (2005).) which has a shared intellectual interest on management of financial relations, business partnering and employee relations, (ii) Diversity Management (e.g., Moss (2010) and Slater *et al.* (2008).) and Stakeholder Management (e.g., Odgen and Watson (1999) and Walley (2013).)[2]. More fundamentally, the RMO notion resonates with Ackoff and Gharajedaghi (1996)'s concept of a social system "in which both

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[2] The research task of enhancing the RMO notion with ideas and theories from Intellectual Capital Management, Diversity Management and Stakeholder Management is not taken up in this paper.

the parts and the whole are purposeful[3]". In this case, the parts are individuals while the whole is a human organization. As the parts are purposeful, there is very often diversity in opinions within an organization. Derived from this understanding, the main concern of a social system (for Ackoff and Gharajedaghi) is thus to "seek to manage relationships" (The SST view of an organization) rather than to "seek to achieve goals" (the HST view). For further conceptual clarity, the HST-based notion is affiliated with the organizational images of machine, team, organism and brain while that of an RMO is more associated with the organizational images of organism, culture, coalition and political system (Ho and Sculli, 1994; Flood and Jackson, 1991).

Moreover, when such as a social system as proposed by Ackoff and Gharajedaghi (1996) is examined closely by a researcher, he/ she is very often presented with a problematic situation with significant soft (inter-subjective) complexity (Ho and Sculli, 1995). In such situations, wicked problems (see Camillus, 2008) emerge from time to time. A problematic situation likes this can be visually expressed in the form of a rich picture (Bell and Wood-Harper, 1998). A rich picture includes various stakeholders with diverse and conflicting concerns, who interact with each other in certain processes as well as tangible/ intangible structures. From the SST perspective, grasping the problematic situation with a rich-picture building exercise, preferably by a group of concerned participants, is an effective way to understand a social system. Subsequently, such an understanding is able to inform the generation of insightful ideas, expressed in the forms of root definitions, based on different world-views for collective and collaborative mode of problem-solving by the parties concerned with the problematic situation (Checkland and Scholes, 1990).

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[3] Being *purposeful* means having free will, which allows an entity, e.g. a person, to choose purpose(s) to pursue.

In terms of Ackoff's (1981) version of SSM, known as interactive planning, effective relationship management of a social system should follow the interactive planning process. This implies that effectiveness of the relationship management itself can also be evaluated in terms of the requirements specified in the eight phases of the interactive planning process. These eight phases are (Ackoff, 1981):

> *Phase 1*: Formulating the mess
> *Phase 2*: Ends Planning I: Idealized design
> *Phase 3*: Ends Planning II: Design of management systems
> *Phase 4*: Ends Planning III: Organizational design
> *Phase 5*: Means Planning I: Formulating alternatives
> *Phase 6*: Means Planning II: Evaluating alternatives
> *Phase 7*: Resource planning
> *Phase 8*: Implementation and control of plans and planning

Figure 1 identifies and relates the concepts involved in the topic of SST-based notion of an organization.

Figure 1: The notion of a relationship-managing organization and its associated notions
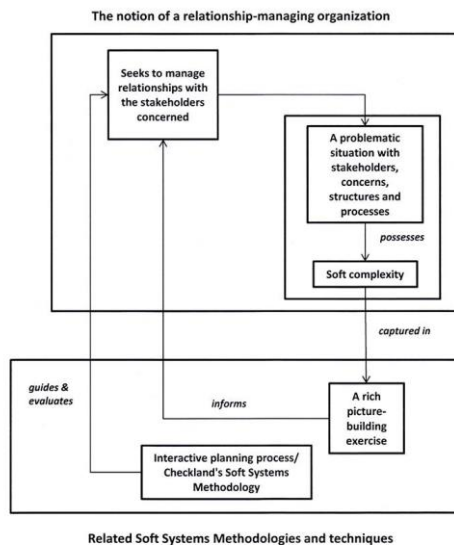
In addition, this set of notions can be expressed in the following five viewpoints for further theoretical clarity:

View 1: The components of an RMO are purposeful; as a result, stakeholders involved in the social system vey often encounter a problematic situation that is pluralistic in nature

View 2: Based on view 1, it is often appropriate to consider an organization as an RMO, rather than a goal-seeking one.

View 3: It is often appropriate to apply Soft Systems Methodologies in an RMO for problem-solving purpose.

View 4: It is very often appropriate to apply Soft Systems Methodologies in an RMO for organizational process and performance evaluation purpose.

View 5: If a particular problematic situation at a specific point in time happens not to be pluralistic in nature, then the SST-based notion of an RMO becomes less relevant as an analytical notion to study the organization concerned.

The problem is, such an explanation of these ideas appears abstract, especially for students new to the subject of SST. Thus, it is useful to illustrate this set of notions with concrete case studies. In this paper, the case study to use is the recent Umbrella Movement (UM) in Hong Kong (Wikipedia, 2014).

Research background and research methods on the Umbrella Movement (UM) illustrative case study

The Umbrella Movement started at the end of September in Hong Kong (Wikipedia, 2014). Over ten thousands local residents occupied trunks of roads in three main protest sites: the first one in Mong Kok, the second one in Causeway Bay and the third one in Admiralty. Conflicts are not restricted to the three protest sites but also incur in the cyberspace, among others (Yang, 2014). The movement was triggered when Beijing broke its promise to grant Hong Kong residents "genuine" open

elections by 2017. The UM is led by a number of informal and novice leaders with voluntary UM supporters (Kaiman, 2014a). The leaders and supporters are all inexperienced especially with this kind of social movement which is totally new in Hong Kong. The symbol of an umbrella expresses the "willingness to prevail against the odds, including police pepper spray and tear gas" (South China Morning Post, 2014). It can be said that this nascent social movement has already made a transformative impact on the political climate in Hong Kong. Readers interested in the genesis and development of the Umbrella Movement should refer to other sources, e.g., Iyengar (2014) and Kaiman (2014b). This paper mainly focuses on the various issues facing the movement from October up to now for illustration of certain Soft Systems notions. Over this period of time, this writer happens to have classes to teach in the education centre close to the Admiralty protest site. Thus, the writer has been able to visit the Admiralty protest site quite frequently, to do field observations and photo-taking. At the same time, secondary data (including photos) are collected from the Internet (see Ho, 2014a) and newspapers, especially the *South China Morning Post*, the main English newspaper in Hong Kong. Photos and newspaper articles are the main artifacts for study in the subject of Housing Imagination (HI) to learn shared meanings held by various groups of people and local communities (Ho, 2014b). This HI technique of studying artifacts is equally applicable in this UM study. Furthermore, a Facebook-based online questionnaire survey was conducted from November 12 to 15 to gauge people's feeling toward the Umbrella Movement at that time. The Facebook-based questionnaire survey approach has been conducted three times beforehand on other research topics; its strengths and weaknesses have been evaluated by Ho (2014c). In the next section, the RMO and its associated concepts are illustrated based on the primary and secondary data gathered from the

research methods employed by the writer for the Umbrella Movement study.

Illustration of the notion of an RMO and its associated notions with the Umbrella Movement case study

To clarify the notion of an RMO, the writer considers a set of newspaper articles from the *South China Morning Post* on the Umbrella Movement. These articles are related to the SST-based notion of an RMO and its associated notions. The SST-based notions are synthesized in Figure 1, which is composed of: (i) seeking to manage relationships, (ii) rich-picture building which covers elements such as stakeholders with concerns, disagreements and conflicts in the problematic situation, interaction between structures and processes, and root definitions[4] (Checkland and Scholes, 1990), and (iii) Ackoff's interactive planning with 8 phases (Ackoff, 1981). These notions, together with the related references on newspaper articles, are summarized in Appendix 1.

The newspaper articles with extracts in Appendix 1 (a table) serve to illustrate the corresponding SST-related notions in the first column of the table. At the same time, Appendix 1 indicates issues and concerns raised in the newspaper articles that can be evaluated by the corresponding SST-related notions in the table's first column. Such an evaluation exercise of the UM based on SST is, however, outside the scope of study in this paper.

From a review of Appendix 1 based on the SST perspective, eight organizational tasks are identified on the Umbrella Movement (UM). They are provided in Table 1, which also includes some related comments.

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[4] A *root definition* names an insightful idea in a structured way as a system that carries out a transformation function. The insightful idea is intended to be relevant for alleviating a problematic situation based on a particular worldview. Also see Gasson (2013) for further details on this concept.

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Table 1: Required UM organizational tasks and related comments

Required Umbrella Movement organizational tasks	*Related comments based on the writer's overall impression*
Task 1: promote the UM vision to the general public.	The UM promotion initiative is not a centralized one but works more like Marketing 3.0 (Kotler *et al.*, 2010) with (i) value propositions being "functional, emotional and spiritual", (ii) product management being co-creation-based with the UM protesters and (iii) brand management being based on character building. Much UM promotion effort is exerted in the production of artworks, see Appendix photos 1 and 2 and Sheehan (2014).
Task 2: work out and clarify the UM vision and positions on related UM topics, e.g., in social and public policies.	While the explicit UM objective is the pursuit for universal suffrage, from the newspaper articles and the posters at the Admiralty protest site, a number of other goals are mentioned, e.g., to maintain Hong Kong's core values as well as to object to a number of social policies, etc.; fundamentally, the full political implications of genuine universal suffrage have not been worked out by the UM supporters. All in all, the UM is a mildly pluralistic voluntary organization.
Task 3: maintain relationships among the UM supporters and sympathizers[5] in the protest sites.	Besides the secondary school and university students, there are other protesters of various age groups and profiles. Some protester groups are more radical than others (see photo 3 in Appendix 2). Overall, most protesters are fully supportive of non-violent form of protest and the objective of genuine universal suffrage (with its full political implications not clearly worked out). Thus, the internal environment of the UM is mildly pluralistic. Activities to nurture good relationship with the UM participants include online and onsite discussion forums, construction and display of UM artworks, singing of UM-related songs at the protest sites and provision of study room, tutorials

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[5] The *stakeholders* of the UM include (i) the UM participants supporters [both the moderates and the radicals] [group 1], (ii) the UM sympathizers [group 2], (iii) the neutral stakeholders [group 3] and (iv) the UM opponents [group 4]. In Table 1, task 3 mainly deals with stakeholders [group 1] while task 5 attends to stakeholders [group 3] and [group 4].

	and library at the protest sites, etc..
Task 4: work out an organizational management unit for protest site maintenance (including various resource management activities) and for the UM planning activities at the strategic, tactical and operational levels.	Management function tends to be loosely structured. Even the more well-known leaders, most from the education community, do not have much authority to organize the participants nor introduce an overall strategy for the UM. The UM leaders proclaim to lead the movement in a democratic way. Sometimes, these leaders have disagreements among themselves on the movement's tactics. Social workers and volunteers offer much support in the conduct of operational and tactical activities in a self-organizing mode. Disagreements on how things at the operational, tactical and strategic levels should be done do happen but are resolvable. Conflicts between the non-radical participants and the radical participants are more severe, however.
Task 5: manage relationships with external stakeholders concerned, both the friendly ones (i.e., the UM supporters and sympathizers), the neutral ones and the hostile ones (i.e., the UM opponents).	The external environment of relationship management is much more, complex, conflictual and coercive than the internal environment. External stakeholders include the religious groups, the business communities, the legal professional community, the educational community, the news media community, the local government, including the police, and the central government, etc.. Activities such as online and off-site discussion forums, and display of UM artworks are less effective when compared to that inside the protest sites. Occupation of roads as protest sites in commercial and business centres creates inconvenience as well as loss of business to the nearby commercial communities, thus spoiling the relationship with this group of external stakeholders.
Task 6: maintain order, security and hygiene in the protest sites.	Protest site hygiene is maintained by volunteers (see photo 4 in Appendix 2). It is challenging to maintain order and security at the protest sites as they are essentially open to the general public (including the trouble-makers). Most of the protesters and visitors behave well at the protest sites. When provocation from UM opponents happens, police needs to be called in to deal with the offence.

Task 7: work out and reposition appropriate tactics to advance the UM objectives in the face of changing internal and external environments.	The process to formulate and implement UM tactics is often done in an informal, ad hoc and self-initiated way by various groups of UM supporters/ sympathizers as well as by individual ones.
Task 8: monitor and assess the various political-social-economic-technological influences on the UM and vice versa, at the local and global levels.	At the protest sites, UM supporters discuss the macro-environmental analysis topic in various forums frequently. Many of them, from all walks of life, appear not well-versed in strategic management, based on the writer's observation at the Admiralty protest site. Also, there is no formal and centralized organizational unit to conduct the macro-environmental analysis.

The comments on the eight UM organizational tasks, reflecting the writer's overall impression on the UM, reveal the pluralistic nature of the problematic situation facing the UM. They illustrate, as a case study, the nature of relationship-managing in an organization as described by Checkland and Holwell (1998). The writer now presents some Facebook-based questionnaire survey findings as a way to further illustrate this RMO notion in the next section.

Findings from a Facebook-based questionnaire survey on the Umbrella Movement, with special reference to the Admiralty protest site

The strengths, e.g., its agility and economic feasibility, and weaknesses, e.g., poor external validity and primitive functions of the survey tool, of the research method of Facebook-based survey on a free-of-charge basis has been examined by Ho (2014b). Due to the dynamism of the factors that impinges on the Umbrella Movement, an agile research method such as a Facebook-based questionnaire survey is desirable. On its agility, from the preparation of the survey form by means of the survey tool offered by KwikSurveys.com to the launching of the survey on the writer's Facebook just took one evening. This

questionnaire survey was conducted from November 12 to 15 this year. The targeted participants are all the "friends" on the writer's Facebook. They are mainly the writer's current and past students whose education backgrounds are in Business Management, Engineering, Accounting and Housing Studies. To improve survey response rate, Facebook messages were sent out to these "friends" as invitations to participate in the survey. Altogether, there were 130 respondents to the questionnaire survey. Due to the fast evolving nature of the Umbrella Movement in Hong Kong, the duration of the survey period has to be short. Otherwise, the survey results can be contaminated by new events that sway people's opinion and feeling toward the Umbrella Movement. In our case, the Facebook-based survey lasted for four days. The raw survey statistics are provided in Appendix 3 and 4. The following are the nine main findings from the survey based on interactive querying on the survey statistics as exported from the survey software database to MS Excel:

Finding 1: 101 respondents (77.7%) are young with age range between 20 and 40; and 93.8% of the respondents have got tertiary education qualification.

Finding 2: 100 respondents (76.9%) support the Umbrella Movement's objective on true universal suffrage. This figure probably has low external validity because most of the respondents are either university graduates or students who tend to be more sympathetic to the movement led mainly by university students. For the 51 male respondents, 38 of them (74%) support the Umbrella Movement's objective. As to the 79 female respondents, 62 of them (78%) support the Umbrella Movement's objective. Overall, the gender of the respondents does not significantly affect the result of the survey response in this case. It should also be noted that, for the 8 respondents who are not degree-holders, 7 of them (87.5%) support the objective of the Umbrella Movement, which is higher than the figure of 76.9% for all the respondents in the survey. Thus,

whether respondents have graduated from the universities or not has insignificant influence on their support of the movement's objective.

Finding 3: 77 respondents (59.2%) have visited the Admiralty protest site; and 70 of them (91%) are supportive of the Umbrella Movement's objective, which is higher than the overall figure of 76.9%. For the seven respondents who have visited the Admiralty protest sites many times, all of them are supportive of the Umbrella Movement's objective.

Finding 4: 51 respondents (39.2% of the total respondents) have visited both the Admiralty protest site and other protest sites; and, among these 51 respondents, 47 respondents (92% of the 51 respondents) are supportive of the Umbrella Movement's objective. That indicates that the Umbrella Movement supporters tend to have visited more than one protest site, besides the Admiralty one.

Finding 5: overall, 89 respondents (68.5%) feel good or very impressed on their visit(s) to the Admiralty protest site. And for all 100 the respondents who support the Umbrella Movement's objective, 87 respondents (87%) feel good or very impressed on their visit(s). This figure indicates that respondents' supportiveness to the Umbrella Movement affects their feeling on their Admiralty protest site visits.

Finding 6: 101 respondents (77.7%) feel that the Umbrella Movement at the Admiralty protest site is reasonably organized or well organized. For those 100 respondents who support the Umbrella Movement's objective, 83 of them (83%) feel that the Admiralty protest site is reasonably organized or well organized. This indicates that the Umbrella Movement supporters perceive the Admiralty protest site to be more organized than non-supporters do.

Finding 7: 51 respondents (39.2% of all the 130 respondents) feel that the present tactics of the Umbrella Movement to be reasonably effective or very effective. For the 100 supporters of the Umbrella Movement's objective, 46 of

them (46%) feel that the Umbrella Movement tactics to be reasonably effective or very effective. This indicates that the Umbrella Movement supporters also feel that the present movement's tactics are more effective than non-supporters do.

Finding 8: 74 respondents (56.9%) out of 130 are either reasonably impressed or very impressed with the artworks at the Admiralty protest site. For the 100 Umbrella Movement's objective supporters, 69 of them (69%) are either reasonably impressed or very impressed with the artworks at the Admiralty protest site. So Umbrella Movement's objective supporters tend to feel more impressed with the Admiralty protest site's artworks than non-supporters do.

Finding 9: 68 respondents (52.3%) agree that the protesters should retreat from the Admiralty protest site now or in the near future. For the 100 Umbrella Movement objective supporters, 45 of them (45%) agree that the protesters should retreat from the Admiralty protest site now or in the near future. This indicates that supporters are slightly less supportive than non-supporters of the Admiralty site retreat now or in the near future by the protesters.

From the survey findings, supporters' of the Umbrella Movement objective have a more favorable feeling toward the movement's organizing performance, the movement's artworks, the protest site visits and the movement's present tactics than non-supporters. Nevertheless, a quite sizable percentage of respondents feel that it is about time for protesters to retreat from the Admiralty protest site. The survey statistics unearth the mildly pluralistic nature of the UM's internal environment with its participants at the Admiralty protest site as (a) 21.1% of the respondents feel that the Admiralty protest site is either not organized or weakly organized and (b) 47.7% of the respondents feel that the present UM tactics are either not effective or only weakly effective. Taken as a whole, the gently pluralistic nature of the UM at the Admiralty protest site lends support to the value of viewing the movement at the Admiralty

protest site from an SST perspective (Jackson and Keys, 1984). This suggests that the RMO notion is a useful analytical concept to examine the UM participants community. (However, it is less helpful for studying the UM's dealing with its external parties who can be more hostile and oppressive, based on the comments on Tasks 3 and 5 in Table 1). All in all, the survey findings serve to quantify with primitive statistics certain key characteristics of the Umbrella Movement, especially on the Admiralty protest site. These characteristics have been spotted by the writer from the writings published on the Internet, in the local newspapers, such as the *South China Morning Post* (re: Appendix 1) and from Table 1.

The Umbrella Movement as an illustration on the RMO notion

Both the local newspaper articles and the survey findings reveal the Umbrella Movement (UM) as a loosely-organized RMO that seeks to maintain relationships among its stakeholders concerned, notably its supporters and sympathizers. The UM relationship-maintaining activities are carried out both at the protest sites and beyond, e.g., in the social media platforms such as Facebook. In actuality, these UM objectives can be interpreted differently by the UM supporters and sympathizers. The main evidence to support this view on inter-subjectivity on the UM objectives comes from the diverse concerns expressed in the posters at the Admiralty protest site. Moreover, all along the Umbrella Movement has been experiencing a turbulent internal and external environment that exhibits soft complexity. This soft complexity can be captured in the form of a rich picture. Using Soft Systems Thinking and Soft Systems Methodologies as analytical frameworks, one can point out that certain organizational and managerial issues and tasks, notably all the eight phases of Ackoff's interactive planning model, have not

been performed well in the Umbrella Movement. After all, the organizing and leading skill of the informal leaders of the movement, some of them being young university students, is amateurish and their power base is relatively weak. Therefore, it can be said that the Umbrella Movement, perceived as an RMO, is loosely managed and led. Its relatively informal management function is not well set up to cope with the soft complexity of the problematic situation it is facing.

The UM case study illustrates why it is often not appropriate to consider the Umbrella Movement as a goal-seeking system, as this HST-based notion mainly assumes the problem context to be unitary wherein there is a strongly shared objective and problem definition among all the stakeholders (Jackson and Keys, 1984). In this regard, the UM, being conflictual on most concerned topics, does not fall squarely into this type of problem context. Furthermore, given the extent of conflicts and uneven distribution of power between the various stakeholders involved, e.g., between the government and the protesters, the RMO notion has also perceptual blind spots when applied in both the UM case study and the UM management. Grounded on SST, the RMO view tends to be politically naïve and insensitive to the coercive factor in a problematic situation (Jackson, 2003). Thus, a more comprehensive examination of the Umbrella Movement needs to consider a broad array of organizational images, such as an instrument of domination, a political system, a psychic prison, and a carnival (Jackson, 2003; Morgan, 1986). Such an examination on the UM with multiple organizational metaphors is outside the aims of this paper. Next, to summarize the ideas from the discussion further, the writer makes use of the 5 views on the SST-based notion of an organization introduced at the beginning of this paper. The summary of ideas is presented as follows:

View 1: The components of an RMO are purposeful; as a result, stakeholders involved in the social system vey often

encounter a problematic situation that is pluralistic in nature: The components, i.e., the various stakeholders, appear to be purposeful and the problematic situation very often appears pluralistic internally. However, externally, the situation is more conflictual and coercive.

View 2: Based on view 1, it is often appropriate to consider an organization as an RMO, rather than a goal-seeking one: It is revealing to perceive the UM as an RMO. Nevertheless, in its dealing with the external stakeholders, the UM encounters tremendous tensions and conflicts. In this case, the RMO notion appears a flawed analytical tool.

View 3: It is often appropriate to apply Soft Systems Methodologies in a social system for problem-solving purpose: They appear to be useful for this purpose but the UM participants, including their informal leaders, are not familiar with SSM and SST. More fundamentally, they are not experienced in organizing and leading skills.

View 4: It is very often appropriate to apply Soft Systems Methodologies in an RMO for organizational process and performance evaluation purpose: SSMs appear to be useful as evaluation tools but they are not applied in the UM nor in this paper for the UM case study.

View 5: If a particular problematic situation at a particular moment in time happens not to be pluralistic in nature, then the SST-based notion of an RMO becomes less relevant as an analytical notion to study the social system concerned: This is unquestionably the case with the external environment of the UM as the UM opponents, e.g., the local and the central governments, are much more powerful in terms of possession of tremendous political, physical, professional and economic resources than the UM supporters. In this case, the external problematic situation can be highly conflictual and coercive. Clearly, the RMO notion is less relevant, based on Jackson and Keys (1984)'s system of systems methodologies framework.

Concluding remarks

Though the infant Umbrella Movement in Hong Kong is only two months' old, it has already transformed Hong Kong into a political city. Moreover, it has generated a lot of artworks and writings on social movement, social policy and politics in Hong Kong. More academic works from the academic community on the UM will surely be produced in due course. Using the Umbrella Movement to illustrate the SST-based notion of an organization (the RMO notion) is intellectually rewarding as it is rich in illuminating content. Simultaneously, this illustrative case study shows the analytical limitations of the RMO notion and its related concepts in those situations that are not pluralistic, but coercive. For this reason, researchers and problem-solvers are encouraged to consider a broad range of organizational metaphors in their investigation and problem-solving endeavors so as to avoid the blind spots with adoption of only one organizational image in organizational analysis. This recommendation essentially endorses the creative holism thinking of Jackson (2003).

BIBLIOGRAPHY:

Abeysekera, I. 2005. "Technical matters: Intellectual Capital" *Financial Management*, July/ August. Published by the Chartered Institute of Management Accountants. UK.: 35-36.

Ackoff, R.L. 1981. *Creating the corporate future*. Wiley. Chichester.

Ackoff, R.L. and Gharajedaghi, J. 1996. "Research Paper: Reflections on Systems and their Models" *Systems Research* 13(1). Wiley: 13-23.

Bell, S. and T. Wood-Harper. 1998. "Chapter 5: What is the problem? The human activity system – making a model"

Rapid Information Systems Development. The McGraw-Hill Companies. London.

Camillus, J.C. 2008. "Strategy as a Wicked Problem" *Harvard Business Review*, May: 99-106.

Chan, T. 2014. "'Police ready to help' clear protesters who ignore court orders" *South China Morning Post,* October 28: A4.

Checkland, P. 1984. "Appendix to Chapter 4: The Changing Process of Systems Analysis: An Outline Systems Analysis" in Tomlinson, R. and I. Kiss (*editors*) *Rethinking the process of Operational Research & Systems Analysis*. Pergamon Press Ltd. Oxford: 61-65.

Checkland, P. and S. Holwell, 1998. "Chapter 2: Information Systems: The Anatomy of a Confusion" *Information, Systems and Information Systems – making sense of the field*. Wiley. Chichester.

Checkland, P. and J. Scholes. 1990. *Soft Systems Methodology in Action*. Wiley. Chichester.

Chen, G. 2014. "Time for Leung to take reality check" *South China Morning Post*, October 27: B12.

Cheung, S. 2014. "The third way" *South China Morning Post*, October 18: A15.

Cheung, R. 2014. "Insight: School councils can teach students how to be leaders" *South China Morning Post,* October 27: C6.

Cheung, S. 2014. "Insight: Actual situation" *South China Morning Post,* October 28: A15.

Cheung, T., S. Zhao and C. Lo. 2014. "Backlash over video said to show the 'hate and violence' of Occupy protesters as lawmakers accuse security chief of 'political propaganda'" *South China Morning Post,* October 28: A4.

Cheung, T. and J. Ng. 2014. "Politics: China 'was very much against democracy" *South China Morning Post,* November 22: C1.

Chou, O. 2014. "We need to keep calm and move on, says Ma" *South China Morning Post*, October 18: C1.

Chow, V. 2014. "Media: HKTV's political drama gets youth vote" *South China Morning Post,* November 23: 6.

Cuganesan, S. 2005. "Intellectual capital-in-action and value creation" *Journal of Intellectual Capital* 6(3). Emerald: 357-373.

Deva, S. 2014 "Degree of rights" *South China Morning Post,* November 22: A13.

Fleisher, C.S. and B.E. Bensoussan. 2003. "Chapter 19: Stakeholder Analysis" *Strategic and Competitive Analysis: Methods and Techniques for Analyzing Business Competition.* Prentice Hall. Upper Saddle River, New Jersey 07458.

Flood, R.L. and M.C. Jackson. 1991. *Creative Problem Solving: Total Systems Intervention.* Wiley. Chichester.

Gasson. S. 2013. "Root Definitions" Drexel University College of Computing & Informatics, Philadelphia. (url address: http://cci.drexel.edu/faculty/sgasson/SSM/Stage3b.html) [visited at November 26, 2014].

Harjani, D.N. 2014. "Hong Kong protesters should take the democracy on offer" *South China Morning Post,* October 9: A15.

Ho, J.K.K. 2014a. "A collection of photo albums on the Umbrella Movement (HK). Joseph KK Ho e-resources blog, November 22. (url address: http://josephho33.blogspot.hk/2014/11/a-collection-of-photo-albums-on.html) [visited at November 23, 2014].

Ho, J.K.K. 2014b. "An Endeavor to Establish the subject of Housing Imagination based on Critical Systems Thinking" *European Academic Research* 2(2), May: 2048-2066.

Ho, J.K.K. 2014c. "A Research Note on Facebook-based questionnaire survey for academic research in business

studies" *European Academic Research* 2(7), October: 9243-9257.

Ho, J.K.K. and D. Sculli. 1994. "Organizational Theory and Soft Systems Methodologies" *Journal of Management Development* 13(7). MCB University Press: 47-58.

Ho, J.K.K. and D. Sculli. 1995. "System Complexity and the Design of Decision Support Systems" *Systems Practice* 8 (5). Plenum Press: 505-516.

Ip, R. 2014. "Ways to counter malign influence" South *China Morning Post,* November 23: 16.

Iyengar, R. 2014. "6 Questions You Might Have about Hong Kong's Umbrella Revolution" Time.com. October 5. (url address: http://time.com/3471366/hong-kong-umbrella-revolution-occupy-central-democracy-explainer-6-questions/) [visited at November 24, 2014].

Jackson, M.C. 2000. *Systems Approaches to Management*. Kluwer Academic/ Plenum Publishers. New York.

Jackson, M.C. 2003. *Systems Thinking: Creative Holism for Managers*. Wiley. Chichester.

Jackson, M.C. and P. Keys. 1984. "Towards a system of systems methodologies" *J. Opl. Res. Soc.*: 35-473.

Lee, D. and A. Chiu. 2014. "Billions spent by city on arms from Britain" *South China Morning Post,* October 28: A4.

Lau, C., E. Kao, T. Sung and S. Chan. 2014. "Arrests, pepper spray as clearance starts" *South China Morning Post*, November 26: cover page.

Kaiman, J. 2014a. "Who guides Hong Kong's 'Umbrella Revolution' pro-democracy movement?" The Guardian, September 30. (url address: http://www.theguardian.com/world/2014/sep/30/hong-kong-pro-democracy-protest-leaders-occupy) [visited at November 27, 2014].

Kaiman, J. 2014b. "Hong Kong's umbrella revolution – the Guardian briefing" The guardian.com. September 30. (url address:

http://www.theguardian.com/world/2014/sep/30/-sp-hong-kong-umbrella-revolution-pro-democracy-protests) [visited at November 24, 2014].

Kotler, P., H. Kartajaya, and I. Setiawan. 2010. *Marketing 3.0: From Products to Customers to the Human Spirit*. Wiley. Chichester.

Lam, W.W. 2014. "From the experts: Keep family ties strong despite different opinions" *South China Morning Post,* October 27: C8.

Liu, C., R. Carvalho and A. Yu. 2014. "Rescued, grabbed or given, anything goes for barricades" *South China Morning Post,* October 18: A4.

Lo, A. 2014. "Police action not the answer to crisis" *South China Morning Post* October 17, A2.

Lo, C. 2014. "Police deploy anti-terror officers to clear barriers" *South China Morning Post*, October 18: A4.

Morgan, G. 1986. *Images of Organization*. Sage Publications. London.

Moss, G. (*editor*) (2010) *Profiting from Diversity: The Business Advantages and the Obstacles to Achieve Diversity*. Palgrave Macmillan.

Ngo, J. 2014a. "Religion on the front line puts faith into practice" *South China Morning Post,* October 27: A4.

Ng. J. 2014b. "Occupy founders hold 'dialogue day'" *South China Morning Post*, November 23: 3.

Ng, J. 2014c. "Website in works to display 'Lennon Wall'." *South China Morning Post*, October 18: A4.

Ng, J., G. Cheung, P. So, F.W.Y. Fung, T. Sung and C. Lau. 2014. "Renewed clashes amid bid to break impasse" *South China Morning Post*, October 18: cover page.

Ng, J. and J. Lam. 2014. "Politics: Student leader in plea to pan-dems" *South China Morning Post,* October 28: cover page.

Ngo, J., V. Chow, A, Nip and J. Lam. 2014. "Keeping on top of supplies" *South China Morning Post*, October 9, A4.

Ogden, S. and R. Watson. 1999. "Corporate Performance and Stakeholder Management: Balancing shareholder and customer interests in the U.K. privatized water industry" *Academy of Management Journal* 42(5): 526-538.

Pepper, S. 2014. "Time for Beijing to be creative, and ensure Leung doesn't get a second term" *South China Morning Post*, October 18: A15.

Sheehan, M. 2014. "The Art of the Umbrella Movement" The worldpost. October 21. (url address: http://www.huffingtonpost.com/2014/10/21/umbrella-movement-art_n_6019350.html) [visited at November 25, 2014].

Siu, P. and T. Cheung. 2014. "Survey: Hongkongers less likely to identify as Chinese: poll" *South China Morning Post,* November 11: C3.

Slater, S.F., R.A. Weigand and T.J. Zwirlein. 2008. "The business case for commitment to diversity" *Business Horizon* 51. Elsevier: 201-209.

South China Morning Post. 2014. "Colour revolution fears overblown" *South China Morning Post*, October 18: A14.

Spinello, R.A. 1997. *Case Studies in Information and Computer Ethics*. Prentice Hall. Upper Saddle River, New Jersey 07458.

Tsang, E., T. Sung and S. Chan. 2014. "Split deepens among Occupy protesters" *South China Morning Post,* November 22: cover page.

Vines, S. 2014. "The real radicals want core Hong Kong values cast aside" *South China Morning Post,* November 22: A13.

Walley, P. 2013. "Stakeholder management: the sociodynamic approach" *International Journal of Managing Projects in Business* 6(3). Emerald: 485-504.

Wang, G.W. 2014. "A test of wills" *South China Morning Post,* October 9: A15.

Wikipedia. 2014. "2014 Hong Kong Protests" Wikipedia.com. (url address: http://en.wikipedia.org/wiki/2014_Hong_Kong_protests) [visited at November 19, 2014].

Wong, Y.C.R. 2014. "The view: which way forward?" *South China Morning Post*, November 26: B12.

Woodhouse, A. 2014. "I wasn't scared of the tear gas but I was scared of this" *South China Morning Post*, October 5: p. 4.

Yang, J. 2014. "Hong Kong protesters in cyberwar" CNN. October 3. (url address: http://edition.cnn.com/2014/10/03/opinion/yang-hong-kong/index.html?iid=article_sidebar) [visited at November 27, 2014].

Yeung, C.K. 2014. "Insight: Grey area" *South China Morning Post*, November 26: A15.

Appendix 1: A set of concepts as associated to the RMO notion and related illustrative extracts from local newspaper articles on the Umbrella Movement (Hong Kong) [re: Figure 1]

Checkland's SSM - Seeking to manage relationships with the stakeholders concerned (Checkland and Holwell, 1998, Ch. 2)
[1] Cheung, R. 2014. "Insight: School councils can teach students how to be leaders" *South China Morning Post,* October 27: C6.
"Students must learn to gain perspective by respecting and accommodating other's views.. For the top student leaders involved, the learning seems more exponential than that of their peers; they are trying to show leadership in crisis situation… while those working for them learn how to coordinate efforts, distribute supplies and consolidate and also attract support…"
[2] Tsang, E., T. Sung and S. Chan. 2014. "Split deepens among Occupy protesters" *South China Morning Post,* November 22: cover page.
"The split among pro-democracy protesters deepened last night with radicals confronting the campaign leadership to demand an equal say on the movement…"
Checkland's SSM - Rich-picture: Stakeholders with concerns (Bell and Wood-Harper, 1998, Ch. 5)
[1] Chou, O. 2014. "We need to keep calm and move on, says Ma" *South China Morning Post*, October 18: C1.

Joseph Kim-Keung Ho- **Using the Umbrella Movement in Hong Kong as an illustrative case study on the relationship-managing organization (RMO) notion in Soft Systems Thinking**

"Everybody should calm down for the good of Hong Kong because history has never gone according to script, a former government minister says. Frederick Ma Si-hang said history would not abide with anyone's wishes or plans… Increasing difficulty in upward mobility had caused youths these days to feel "a lack of hope", Ma said…"

[2] South China Morning Post. 2014. "Colour revolution fears overblown" *South China Morning Post*, October 18: A14.
"Unlawful occupiers of Hong Kong's roads the students may be, but violent protesters intent on overthrowing the government they are not. Beijing thinks otherwise. Officials are increasingly referring to the demonstrators in terms of a "colour revolution", contending that "foreign forces" are behind their action… The colour yellow has been adopted by protesters to show solidarity, the umbrella to symbolize a willingness to prevail against the odds, including police pepper spray and tear gas…"

[3] Chen, G. 2014. "Time for Leung to take reality check" *South China Morning Post,* October 27: B12.
"For Chief Executive Leung Chun-ying, one of his problems is that he doesn't believe he has done anything wrong…. It is his extreme self-importance towards governance that has contributed to the city's worst political crisis in decades…"

[4] Cheung, S. 2014. "Insight: Actual situation" *South China Morning Post,* October 28: A15.
"Stephanie Cheung says the government must come clean about the real obstacles impeding democratic progress, and start by submitting a supplemental consultation report to Beijing…. [Chief Executive Leung Chun-ying]'s real reason for denying open nomination for chief executive candidates is because, he claims, more than half the Hong Kong electorate earns less than HK$14,000 a month, so voting would favour this sector.."

[5] Lee, D. and A. Chiu. 2014. "Billions spent by city on arms from Britain" *South China Morning Post,* October 28: A4.
"The British government's role in licensing the sale of arms to Hong Kong that could be used for "internal repression" has come under scrutiny… John Stanley, chairman of the Committee on Arms Export Controls, has written to Business Secretary Vince Cable, asking him to clarify if "Made in the UK" tear gas canisters were used against pro-democracy protesters…"

[6] Cheung, T. and J. Ng. 2014. "Politics: China 'was very much against democracy" *South China Morning Post,* November 22: C1.
"It is "complete nonsense" to suggest that China "always wanted democracy" from Hong Kong…. ..former Hong Kong Patten told a US commission. "The Chinese were very much against this moving to greater democracy… because they thought it might lead people in Hong Kong to think they will eventually be independent like, say, Singapore," he said…"

Checkland's SSM - Rich-picture: Disagreements and conflicts in the problematic situation (Bell and Wood-Harper, 1998, Ch. 5)
[1] Woodhouse, A. 2014. "I wasn't scared of the tear gas but I was scared of this" *South China Morning Post*, October 5: p. 4.

"A women has alleged that she and other female pro-democracy activists were sexually assaulted by a man opposing the Occupy movement in Causeway Bay on Friday – and that police did nothing about it."

[2] Lam, W.W. 2014. "From the experts: Keep family ties strong despite different opinions" *South China Morning Post,* October 27: C8.
"As tension mount, there have been a growing number of family problems. The Occupy Central Movement has divided society and impacted relationships within families and between friends…"

[3] Cheung, T., S. Zhao and C. Lo. 2014. "Backlash over video said to show the 'hate and violence' of Occupy protesters as lawmakers accuse security chief of 'political propaganda'" *South China Morning Post*, October 28: A4.
"Security chief Lai Tung-kwok yesterday attempted to lift the lid on "hate and violence" by Occupy protesters with a video of clashes with police – but found himself on the receiving end of a backlash amid accusations that he left out inconvenient events.."

[4] Lau, C., E. Kao, T. Sung and S. Chan. 2014. "Arrests, pepper spray as clearance starts" *South China Morning Post*, November 26: cover page.
"At least 80 protesters were detained yesterday amid clashes with police during the first round of court-ordered clearance operations in the Mong Kok protest zone…"

Checkland's SSM: Rich-picture: Interactions between structures and processes in the problematic situation (Bell and Wood-Harper, 1998, Ch. 5)
[1] Wang, G.W. 2014. "A test of wills" *South China Morning Post*, October 9: A15.
"Wang Gungwu says that Hong Kong has long been a home to people of all ideological stripes. Today's young people are standing up to the authorities to protect their heritage of freedom…. Hong Kong had always been a restless city that attracted risk-takers no less than refugees.

[2] Cheung, S. 2014. "The third way" *South China Morning Post*, October 18: A15.
"Youth of Hong Kong, your demands for real democracy have been heard. Not only in Hong Kong, but in other parts of the world. You have acted with admirable self-discipline, respect and reason. Your good manners, tidiness, patience, peace and goodwill, sleeping out and studying in the streets, have not gone unnoticed…."

[3] Liu, C., R. Carvalho and A. Yu. 2014. "Rescued, grabbed or given, anything goes for barricades" *South China Morning Post*, October 18: A4.
"From metal barriers to bus stop signs, traffic cones, pieces of wood, bamboos and cement, protesters used anything they could get their hands on to build the barricades that paralysed traffic in Admiralty, Causeway Bay and Mong Kok…. Teams of volunteers were formed to collect materials and build barricades – the same teams that were responsible for clearing away rubbish…."

[4] Lo, C. 2014. "Police deploy anti-terror officers to clear barriers" *South China Morning Post*, October 18: A4.
"More than 100 officers from elite anti-terrorist and airport security units were among the 1,000 police deployed yesterday to clear barricades in Mong Kok that have blocked a busy road junction for nearly three weeks… "

[5] Ng, J., G. Cheung, P. So, F.W.Y. Fung, F, T. Sung and C. Lau. 2014. "Renewed clashes amid bid to break impasse" *South China Morning Post*, October 18: cover page.
"Violent clashes between demonstrators and riot police erupted in Mong Kok last night, casting doubt over what the government said were fresh moves to start talks with students in a bid to end a seemingly intractable impasse over electoral reform that has sparked almost three weeks of unprecedented street protests…"

[6] Ngo, J. 2014a. "Religion on the front line puts faith into practice" *South China Morning Post,* October 27: A4.
"In Mong Kok, Taoist god of war Guan Yu sits in an impressive makeshift temple within the protest site; sharing the spiritual space is a chapel where Christians can pray and a place where Buddhist chants are played through a speaker…"

[7] Chan, T. 2014. "'Police ready to help' clear protesters who ignore court orders" *South China Morning Post,* October 28: A4.
"Police are ready to help bailiffs by arresting protesters who flout injunctions ordering them to clear the streets, the High Court heard yesterday. The comments came from a barrister for the government as the court considered whether to keep in force interim orders against protesters blocking streets in Mong Kok and Admiralty, granted on October 20 to groups representing taxi drivers, minibus owners and the owner of a skyscraper…"

[8] Siu, P. and T. Cheung. 2014. "Survey: Hongkongers less likely to identify as Chinese: poll" *South China Morning Post,* November 11: C3.
"Hongkong's sense of Chinese identity has hit a record low, a Chinese University survey conducted during the Occupy Central protests found, as local student organizers plan their overtures to state leaders in Beijing…."

[9] Chow, V. 2014. "Media: HKTV's political drama gets youth vote" *South China Morning Post,* November 23: 6.
Hong Kong's first publicly elected chief executive is killed on the night of the poll; a candidate for the top job is caught having extra-marital affairs; the leader of a pro-Beijing party tries to manipulate his way to victory despite being turned away by forces from north of the border. The plots sound familiar but this political reality exists only in HKTV drama The Election…"

[10] Ng. J. 2014b. "Occupy founders hold 'dialogue day'" *South China Morning Post*, November 23: 3.
"Today, Occupy volunteers, students and pan-democrat law-makers will be stationed at 21 locations across the city to share their views on universal suffrage.."

Checkland's SSM: Insightful ideas (root definitions) relevant for alleviating the problematic situation (Bell and Wood-Harper, 1998, Ch. 5)

[1] Ng, J. 2014c. "Website in works to display 'Lennon Wall'." *South China Morning Post*, October 18: A4.
"Its days may be numbered, but the "Lennon Wall" on Harcourt Road, Admiralty – a rainbow collage of colourful notes supporting the democracy protests – is being

preserved digitally. Wall creator Lee Shuk-ching, who has spent much of her time in recent days putting notes up and handing out pens, is working with co-creater Chow Chi, a social worker, and others to take pictures of the notes with a view to putting them online….."

[2] Pepper, S. 2014. "Time for Beijing to be creative, and ensure Leung doesn't get a second term" *South China Morning Post*, October 18: A15.
"There are ways out of Hong Kong's current impasse over political reform if only the principals can indulge in some creative political thinking…. One is that Chief Executive Leung Chun-ying should not serve a second term; the other is that public recommendation can serve as a substitute for public nomination…."

[3] Cheung, S. 2014. "Insight: Actual situation" *South China Morning Post,* October 28: A15.
"Stephanie Cheung says the government must come clean about the real obstacles impeding democratic progress, and start by submitting a supplemental consultation report to Beijing…. [Chief Executive Leung Chun-ying]'s real reason for denying open nomination for chief executive candidates is because, he claims, more than half the Hong Kong electorate earns less than HK$14,000 a month, so voting would favour this sector.."

[4] Ng, J. and J. Lam. 2014. "Politics: Student leader in plea to pan-dems" *South China Morning Post,* October 28: cover page.
"A student protest leader has urged pan-democratic politicians to step up their involvement, including leading further dialogue with the government and setting a referendum…"

[5] Deva, S. 2014 "Degree of rights" *South China Morning Post*, November 22: A13.
"The ongoing umbrella movement has triggered a volcano of creative imagination in Hong Kong, with new ideas, governance paradigms and legal principles being tested almost every day.."

[6] Ip, R. 2014. "Ways to counter malign influence" South *China Morning Post,* November 23: 16.
"Regina Ip says that, in order to fight harmful external ideas, the best option for the government is to resell the benefits of the Basic Law and 'one country, two systems' to the people.."

Interactive planning: (Ackoff, 1981) - Phase 1: Formulating the mess

[1] Lo, A. 2014. "Police action not the answer to crisis" *South China Morning Post*, October 17: A2.
"Protesters think they have morality on their side. Front-line police officers are told they have the law on their side. If you think you are fighting for a just cause, the police must appear to be a force for oppression…. … Officers are not trained to worry about politics. Yet they are caught in a volatile political crisis….. But what is remarkable is… the extraordinary restraint the police force as a whole has shown over the past three weeks. The danger is that as the protests drag on with no end in sight, both sides will escalate their confrontations…."

[2] Wong, Y.C.R. 2014. "The view: which way forward?" *South China Morning Post*, November 26: B12.

"It may be too early to predict political life after the Occupy movement ends… The future of democracy in our city may well hang in the balance, but will it follow the path of a liberal democracy or a populist democracy?.."

Interactive planning: (Ackoff, 1981) - Phase 2: Ends Planning I: Idealized design

[1] Harjani, D.N. 2014. "Hong Kong protesters should take the democracy on offer" *South China Morning Post,* October 9: A15.

"Since the start of the Occupy movement in Hong Kong, newspapers have been replete with contradictory messages and slogans that lead to confusion, antagonism and therefore leave people divided and in a dilemma. The movement's objectives seem capricious, and have changed from the demand for universal suffrage and the resignation of the chief executive to Beijing-bashing, and blaming the police and anti-Occupy protesters…. we need to understand democracy, the principles of non-violence and our realistic relationship with the mainland.."

[2] Vines, S. 2014. "The real radicals want core Hong Kong values cast aside" *South China Morning Post,* November 22: A13.

"In all the noise and anger that surrounds the umbrella movement, one vital point appears to have been overlooked. This is that the fundamental aim of most protesters is a conservative one, namely to preserve the unique character of Hong Kong…. "

[3] Yeung, C.K. 2014. "Insight: Grey area" *South China Morning Post*, November 26: A15.

"C.K. Yeung believes a diverse network of competing think tanks can provide good policy ideas that answer Hong Kong's critical need for better governance, especially post 2017.."

Interactive planning: (Ackoff, 1981) - Phase 3: Ends Planning II: Design of management systems

[1] Cheung, R. 2014. "Insight: School councils can teach students how to be leaders" *South China Morning Post,* October 27: C6.

"Students must learn to gain perspective by respecting and accommodating other's views.. For the top student leaders involved, the learning seems more exponential than that of their peers; they are trying to show leadership in crisis situation… while those working for them learn how to coordinate efforts, distribute supplies and consolidate and also attract support…"

Interactive planning: (Ackoff, 1981) - Phase 4: Ends Planning III: Organizational design

[1] Tsang, E., T. Sung and S. Chan. 2014. "Split deepens among Occupy protesters" *South China Morning Post,* November 22: cover page.

"The split among pro-democracy protesters deepened last night with radicals confronting the campaign leadership to demand an equal say on the movement…"

Interactive planning: (Ackoff, 1981) - Phase 5: Means Planning I: Formulating

alternatives

[1] Cheung, R. 2014. "Insight: School councils can teach students how to be leaders" *South China Morning Post,* October 27: C6.

"Students must learn to gain perspective by respecting and accommodating other's views.. For the top student leaders involved, the learning seems more exponential than that of their peers; they are trying to show leadership in crisis situation… while those working for them learn how to coordinate efforts, distribute supplies and consolidate and also attract support…"

Interactive planning: (Ackoff, 1981) - Phase 6: Means Planning II: Evaluating alternatives

[1] Cheung, R. 2014. "Insight: School councils can teach students how to be leaders" *South China Morning Post,* October 27: C6.

"Students must learn to gain perspective by respecting and accommodating other's views.. For the top student leaders involved, the learning seems more exponential than that of their peers; they are trying to show leadership in crisis situation… while those working for them learn how to coordinate efforts, distribute supplies and consolidate and also attract support…"

Interactive planning: (Ackoff, 1981) - Phase 7: Resource planning

[1] Ngo, J., V. Chow, A, Nip and J. Lam. 2014. "Keeping on top of supplies" *South China Morning Post,* October 9: A4.

"Walking through the protest sites in Admiralty, Causeway Bay and Mong Kok at the height of the demonstrations, ad-hoc supply stations were a common sight. However, most of the scores of tenets were not put up by Occupy Central or the Federation of Students, but by protesters on their own…. other items – including goggles, masks, water and food – came from a number of secret donors…"

Interactive planning: (Ackoff, 1981) - Phase 8: Implementation and control of plans and planning

[1] Cheung, R. 2014. "Insight: School councils can teach students how to be leaders" *South China Morning Post,* October 27: C6.

"Students must learn to gain perspective by respecting and accommodating other's views.. For the top student leaders involved, the learning seems more exponential than that of their peers; they are trying to show leadership in crisis situation… while those working for them learn how to coordinate efforts, distribute supplies and consolidate and also attract support…"

Appendix 2: Four photos on the Umbrella Movement in Hong Kong

Photo 1: An artwork at the Admiralty protest site: the Umbrella Man statue (source: from the writer)

Photo 2: An artwork at the Admiralty protest site: the "Lennon Wall" (source: from the writer)

Photo 3: The radical protesters (source: from the Internet)

Photo 4: A student doing the cleaning task at the protest site on a voluntary basis (source: from the Internet)

Appendix 3: The Facebook-based survey questions and responses statistics

Survey questions	Survey statistics
Question 1: What is your gender?	Male: 51 (39.2%) Female: 79 (60.8%)
Question 2: What is your age?	Below 20: 1 (0.8%) 20-30: 37 (28.5%) 31-40: 64 (49.2%) 41-50: 24 (18.5%) 51-60: 4 (3.1%) Above 61: 4 (3.1%)
Question 3: What is your education level?	Not a degree-holder: 8 (6.2%) An undergraduate degree-holder or equivalent: 58 (44.6%) A post-graduate degree holder: 54 (49.2%)
Question 4: Do you support the Umbrella Movement's objective on true universal suffrage?	Yes: 100 (76.9%) No: 30 (23.1%)
Question 5: Have you visited the Umbrella Movement protest site in Admiralty?	No: 53 (40.8%) One to two times: 49 (37.7%) Several times (3 to seven times): 21 (16.2%) Many times (more than seven times: 7 (5.4%)
Question 6: Have you also visited other Umbrella Movement protest sites besides the Admiralty one?	No: 56 (43.1%) Yes: 74 (56.9%)
Question 7: What is your overall feeling on your visit(s) to the Admiralty protest site?	Bad: 15 (12.3%) No feeling: 18 (14.8%) Feel good basically: 46 (37.7%) Very impressed: 43 (35.2%)
Question 8: Do you feel that the Umbrella Movement at the Admiralty protest site is well	No: 12 (9.4%) Weakly organized: 15 (11.7%) Reasonably organized: 75 (58.6%)

organized?	Well organized: 26 (20.3%)
Question 9: How do you feel about the tactics of the Umbrella Movement in terms of meeting their movement objectives?	Not effective at all: 21 (16.4%) Weakly effective: 40 (31.3%) Reasonably effective: 46 (35.9%) Very effective: 5 (3.9%) No idea: 16 (12.5%)
Question 10: Are you impressed with the artworks in the Admiralty protest site?	Not at all: 19 (15.0%) They are basically nice: 34 (26.8%) Reasonably impressed: 35 (27.6%) Very impressed: 39 (30.7%)
Question 11: Do you feel that the Admiralty site protesters have strongly shared objective on the Umbrella Movement?	They have strong disagreement among themselves: 8 (6.3%) They weakly share their movement objectives: 13 (10.2%) They reasonably share their movement objectives: 67 (52.3%) They strongly share their movement objectives: 40 (31.3%)
Question 12: Do you agree that the Admiralty site protesters are friendly overall?	No idea: 9 (7.0%) No: 11 (8.6%) Basically agree: 50 (39.1%) Strongly agree: 58 (45.3%)
Question 13: Do you agree that the protesters should retreat from the Admiralty protest site now or in the near future, given their goal is not to be met now or in the near future?	Yes, they should retreat: 68 (52.3%) No, they should not retreat now or in the near future: 26 (20.0%) No idea: 36 (27.7%)

Appendix 4: Response statistics over time, from November 12 to 15, 2014