



A Concise Theoretical Grounding of Action Research: Based on Checkland's Soft Systems Methodology And Kimura's Phenomenological Psychiatry

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Abstract

Action Research (AR) is a methodology to obtain “learning by doing” bridging theory and practice or cognition and action. This is in contrast to positivism which is contained within scientific knowledge by distinguishing between theory and practice. The active characteristics of AR such as “learning by doing” have attracted both researchers and practitioners who found themselves constricted by the passive limitation of the epistemology in positivism. However, in an attempt to make a rigorous theorizing AR, most attempts have fallen into the trappings of pseudo positivism. This has come about due to the difficulties attempting to conceptualize subjectivity and the nature of first-person characteristics of action. Not all attempts have been met by failure. Peter Checkland's SSM(Soft Systems Methodology) has been able to maintain rigorous validity by introducing the notion of “recoverability” in AR. “Recoverability” within SSM represents the rigorous credibility of the methodology as opposed to scientific positivism in “repeatability”. In SSM recoverability is secured “publicity” while positivists' repeatability is based on “objectivity” and “universality”.

This paper tries to theorize AR rigorously by introducing the phenomenological thinking of Bin Kimura in his “actuality” theory and Michel Henry's notion of “auto-affection” in SSM. In drawing from this thinking a model relevant to “actuality” and a theory concerning “actual learning” are developed. Finally, by the development of such models and theory we will be able to see paradigmatic change from “realism” to “actualism”, which is an essential compartment of AR.

0) Introduction

Action Research (AR) facilitates an endless cycle of “learning by doing”. The researcher takes action in a problematical situation in the real world intervening in it as the first person to improve it, reflects on the experience and then takes further action based on the reflection. This approach is very different from the research

methods in scientific positivism. AR aims to gain experience-based knowledge that can be applied to the real world through practice by the researchers themselves, while also attempting to improve the real situation.

AR is not the research *of* action but the research *concerned with* action. In order to understand this nature of Action Research it is necessary that conventional systems theory (hard systems thinking) undergoes radical change conceptually. Checkland and Scholes who emphasize the *Systemic* emergent property rather than the *Systematic* order (1999, pp.22-23) note:

...hard systems thinking assumes that the perceived world contains holons, soft systems thinking takes the stance that the methodology, M, the process of enquiry, can itself be created as a holon. In the case of SSM we have a cyclic methodology which is itself a systemic (we would better say, holonic) process, one which within its procedures happens to make use of models of holons.

Conventional systems thinking, which assumes there *are* systems in the real world, attempts to formulate approximate forms of systems as an imitation of reality in order to verify them. In this methodology the researcher, as it were, observes human action as a objects and formalizes this observed action as a pattern (systems). In contrast the researcher who is *concerned with* action can not know whether “systems” really *exist* in the real world or not. More importantly, for the researcher, the system can be constructed in the *process* of investigating the real world. Therefore, a change to systems thinking means a change of the notion of system itself. Checkland and Scholes (1999, p.12) notes:

In the General Systems Theory, Bertalanffy(1968) clearly regards system as an abstract concept, but unfortunately he immediately starts using the word as a label for parts of the world. Now, going back to the idea of ‘an education system’, it is perfectly legitimate for an investigator to say ‘I will treat education provision as if it were a system’, but that is very different from declaring that it is a system.

According to Checkland ‘system’ needs to be refer to as ‘holon’ (Koestler 1967,1978) which is adopted for the abstract idea of a whole having emergent properties, a layered structure and processes of communication and control (ibid., p.22). We can interpret Checkland’s systems theory relevant to Action Research as follows: As Bertalanffy also says ‘a whole is not the same as all (the total sum of parts)’, the ‘whole’ and the ‘all’ belong to a different dimension. In comprehending the whole

we should not perceive the whole as being made up of all the parts. The whole can not comprehend by *perception* in any sense. It is, as it were, a sense of action, such as learning by doing, which comprehends the meaning of the *emergent properties*. For example, to listen to music as a whole does not mean that we listen to each sound or note individually. When we listen to music as a whole, we are actually listen to the meaning of music as an emergent property. We listen to each sound or note *both as something and someone*. Systems, which Checkland points out is not the coherent order of the total sum of the parts but a whole which is appearing to us as an emergent property.

In AR, the researcher is not an observer, detached from the research field, but rather he or she is involved within the research object. By involvement within the research field the researcher acquires “some feeling” as emergent properties from the field, “touching it” in the process of his or her research. Based on this “something felt”, the researcher expresses his or her feeling as a model and looks into the real world again through the model. The researcher obtains learning from the difference between the “something felt” and the real world.

This notion of “something felt” is very difficult to spell out logically. However, for example, when I see my late father’s old watch, I can feel something about it. It can be said that the old watch reminds me of my late father, including the whole history of our relationship. This type of “something felt” as a whole is not a “thing”. It is not a feeling that can be comprehended by the five senses. Rather, it is a type of feeling which can be comprehended by an Aristotelian “common sense”- a transcendental sense common among the five senses, like sense of movement or the feeling of reality. This Aristotelian common sense also makes metaphor possible. For example, the word “sweet” is thought to belong to taste but we can use the word in another sense, like “sweet touch”, “sweet music”, or a “sweet scene”. Aristotelian common sense enables us to understand these metaphors because the meaning of “sweet” not only belongs to the sense of taste but also to common sense.

The “something felt” which is only comprehended by *Aristotelian common sense* is called by Japanese phenomenological psychiatrist Bin Kimura(1994), “actuality”. “Actuality” is distinguished from “reality” (which is comprehended by the five senses). According to Kimura, French philosopher Henry (1993) also names this “something felt” as the “auto affection appearing to us” or the “manifestation in the immediacy of living”.

AR needs to be, from a rigorous academic point of view, grounded theoretically based on this “something felt” or “actuality” if it is to be distinguished from the conventional AR ambiguous in its boundary with positivism. Soft Systems

Methodology (SSM) can be thought as a methodology that can introduce “actuality” into the process of AR.

In the following sections, after considering the two kinds of knowledge, the concept of “actuality” is first introduced relevant to the characteristics of AR. SSM is then re-constructed from an “actuality” point of view as a methodology of AR. Some concluding remarks will bring together my main arguments after the discussion of validity and legitimacy of SSM-based AR.

1) Two Kinds of Knowledge

In conventional Western traditions, scholars have been asking, “what *is* the real world?” in order to gain precise knowledge of the real world in a quest for truth. However, Augustinus confesses, “up until someone asked, I knew what time was. But when questioned about what time was, I was unable to provide an exact explanation”. Checkland points out that we do not know whether the real world is a system or not, but we can embody a system in the process to explore the real world. In other words, we can only tell what we are thinking to be the real world instead of what the real world is.

In conventional Western thinking, to know is to see objectively. In this way, it seems possible that knowledge of the real world can be obtained through the analysis of “what was seen as an object” or “representation”. The English word “theory” originally comes from the Greek *teoria*, which means “to see”. To see, in the Western sense, is not the process of seeing in action but the *what was seen* as fact or “reflection *on* action”, which means separation between cognition and action. In conventional Japanese thinking, on the other hand, “to know” cannot be separated from “to do”(“to do” includes “seeing” in action as a process). In the Japanese sense, the source of knowing is “learning by doing” or “reflection *in* action”, which does not mean “our knowing is in our action (Schon, 1983, p.49)” but the argument of “unity between cognition and action (Weizäcker 1940)”.

Thus, there are two kinds of methods to know or comprehend the real world (it can be replaced by ‘the life world’). One is to gain knowledge of the real world by seeing it as an object and viewing this object through the eye’s of the third person who is detached from the real world. The other is to learn from the real world by intervening as the first person, internalizing the experience-based knowledge gained from the intervention. The former corresponds to the positivist, and the latter to the action researcher. In other words, while positivists look for scientific explicit knowledge, action researchers want to embody tacit or implicit knowledge.

When I was working for IBM as a manager, my boss always said “you should stick to your office desk so you can objectively *see* the market from a birds-eye

view.” In contrast, when I was working for CASIO before IBM, a typical Japanese company, my boss made me go to see the customer managers. These managers only knew the market through attachment to the customer and could *hear* the voice of the market only from an insect’s point of view, or by “finding themselves in the market”. This story tells us that in order to hear the needs of the market it is necessary to be attached to the market because the voice of the market cannot be heard when we are detached from it. In contrast, we need some distance from the market to see it because we cannot see the market objectively if we are attached to it. Apparently, “to see” and “to hear” seems to be in a complementary relationship, but to understand AR correctly, we must first put aside the knowledge mode of “to see” methodologically, because AR completely tried to seek the knowledge based on “to hear” mode.

While, in the Western way of thinking, objective knowledge (explicit knowledge, (Nonaka and Takeuchi 1995)) of the real world is wanted in order to control it, in the Japanese way of thinking, experience-based knowledge (tacit knowledge) relevant to the real world by means of being concerned with it is wanted in order to learn something from it. Thus, the real world is explained as an *object* in Western thinking, whereas it is comprehended as a *process* of the “feeling of practice” (*le sens pratique*, (Bourdieu 1990)) for the Japanese.

These two modes of knowledge were reflected in the Japanese world-wide success in Quality Control (QC) management. Though the QC method had been originally developed by management scientists in US as a technique of factory control, when implemented in Japan, it was reinterpreted from the Japanese way of thinking as a philosophy of management. Simply put, American QC could be defined as:

a system to check the defects
by means of statistical methods owned by specialists
in order to win the competitiveness among companies.

The essence of the definition is “to check the defects” and it has to be performed by using scientific knowledge of specialists. In this case the knowledge of specialists and the experience based knowledge of workers on site are completely separated. This kind of separation does not fit well with Japanese factories where specialists and workers on site collaborate in the production line to improve it, which is the typical Japanese organizational culture. Thus the concept of QC has been redefined by the Japanese as:

a system to prevent defects
by means of improving production lines by the workers concerned
with operation
in order to meet the customer's demands for complete quality.

It seems to the West that this is only the conception because “to prevent defects” would be impossible to realize from a strict scientific point of view.

However, Japanese corporate executives make much of the workers' experienced-based knowledge rather than specialists' scientific knowledge to prevent defects. As such, for the American Executive it is enough to achieve a 91% degree of QC compared with the other competitors' 90% degree in order to achieve competitiveness while for the Japanese one seeks for 100% degree in order to meet customer's demands for complete quality. The demands for 100% degree, in a sense, seems to the Western to be *irrational*, but the Japanese make much of the *process* to produce the goods rather than the result of producing. When the conflict of BSE (Bovine Spongiform Encephalopathy) problem happened between Japan and USA, Japanese customers demanded for actual peace of mind (feeling of safety) rather than safety itself, because they do not believe or trust the statistical scientific result of safety without process but the actual process to prevent the BSE.

The consequence of the Japanese reinterpretation of QC resulted in, what they call, the “Japanese miracle”, that is, the improvement of quality and cost reduction happened at the same time. According to the American concept of QC, it is rational that the higher the quality is, the higher the cost is because the number of checks has to increase in order to achieve higher quality. It is the basis on which, or the reason why they decide the degree of QC by comparison with competitors. However, in the Japanese way of QC, workers on site improved their production line to prevent defects, as the consequence of this, the higher the quality was, the lower the cost was. Though this was the result of Japanese corporate culture based on organizational learning like AR, many Western companies failed to implement this method without importing the Japanese organizational culture. Robert Cole (1994, p.81) notes:

It must be pointed out that the process by which the modern quality paradigm developed in Japan was itself a process of organizational learning. Individual firms collaborated with one another under the framework of the Japanese Union of Scientists and Engineers to develop and diffuse best practices. I have traced these developments elsewhere (Cole 1989), but let it be said that it was a highly creative process that went far beyond the

initial inspiration provided by American quality leaders. Indeed, Japanese success in this area can be seen as part of a broader patterned approach to organizational learning.

In the following section, I will go on to think through these two modes of knowledge in greater depth and introduce Kimura's distinction between "reality" and "actuality".

2) Kimura's Theory of "Reality" and "Actuality"

Japanese phenomenological psychiatrist Bin Kimura (1994) classified what people are actually thinking to be the real world (life-world) into two phases: "reality" and "actuality". In everyday English, reality is used as an antonym to imaginary. However, it is both "reality" and "actuality" that properly reflect the opposite sense of meaning to imaginary. Kimura explains that the Latin root of the word "reality" comes from *res*, meaning "things", while "actuality" comes from the Latin *actio*, meaning "action". (In the Japanese language, we have proper words to relate this consequences; *mono* (reality) and *koto* (actuality).) He emphasizes that "things" can be perceived by our senses, but "action" cannot. "Reality" belongs to the cognitive side of the real world, while "actuality" belongs to the active side. Action and cognition belong to completely different levels analytically.

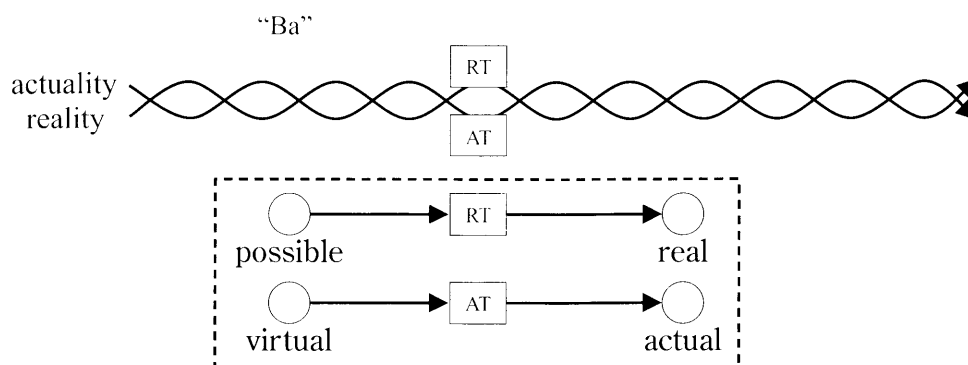
Kimura tactically explains this distinction taking the psychiatric case of de-personalization. The symptoms of de-personalization or de-realization indicate the loss of feeling or texture of things and events namely the feeling of distance and time. Although patients with this symptom have no disturbance of intelligence and perception, they have lost their feeling of the real world (the life world) entirely. For example, they can recognize what time it is, but do not have a feeling for time. Thus they cannot take action based on *timing*. They can recognize the distance between the car and the wall as data ("reality") when they drive the car into the carport, but due to the loss of feeling of distance ("actuality") they crash the car into the carport wall. Kimura argues that this symptom can be said to be "de-actualization" rather than "de-realization", because they have lost feeling of the real world or "actuality" whereas they maintain their "reality" or perception of the real world.

It needs to be noted here that Kimura never claims this "reality/actuality" distinction as a dualism but that "actuality" is a fundamental feeling that enables the perception of "reality" as duality. This can be thought of as "biological differences" comparable to Heidegger's well-known notion of "ontological differences" – that is, the difference between "Being" and "being of beings". For people without the above symptoms, the real world can be comprehended as an intertwining of "reality" with

“actuality”. Only people with de-personalization can really feel the loss of “actuality”. People without de-personalization cannot easily imagine the world of mere “reality” without “actuality”. Take for instance the unfamiliar feeling of an English-speaking person (someone who does not know Arabic or Chinese) who sees a newspaper written in Arabic or Chinese characters. This person does not feel the “actuality” of this newspaper whereas they can perceive the characters as data (“reality”). In other words, “actuality” is something that is the very essence of natural self-evidence in everyday life and when lost, the meanings of the real world disappear.

According to Kimura, mentally healthy people who dare to approach “actuality” feel a strong resistance to doing so, and it is this resistance that is the evidence of mental health. He quotes “Descartes’ Second Meditation” as the case of trying to approach “actuality” against the resistance, that is, “It is seeming to *me* that *I* am seeing...”. Kimura claims this “me” indicates the self of the “actuality” side generated by life as “auto-affection” (Henry 1993) and “I” indicates the “reality” side. However, in the everyday life we are not always aware of “It is seeming to me” because it is a natural self-evidence for us. However, people with de-personalization suffer from the discordance between the two forms selves or “me” and “I”. Thus, it is very difficult for us who do not have de-personalization to be able to clearly distinguish “actuality” and “reality”. In our every day life, “actuality” and “reality” are mixed and penetrate each other. We can only separate them analytically. In SSM-based AR, we conceive the real world situation as a place, or “ba” (after Nonaka et al., 1995), where “actuality” and “reality” are intertwined (see Fig.1).

Fig.1 Actual Transformation (AT) and Real Transformation (RT) in “Ba”



This notion of the world is neither the positivist nor the naïve idealist who conceives it only from the simple subjective point of view. It is also different from “Critical Realism” which asserts “ the fundamental purpose of social inquiry is to explain the forces at work within a situation by seeing them in terms of ‘structures’

underlying immediate experiences (Bhasker 1989 in Winter and Giddings 2001)". In SSM-based AR we are not concerned with such a existence of structures or systems in the reality level but interested in the possibility of *accommodation* among people in the "actuality" level.

In considering how to implement experience-based knowledge methodologically in the process of AR we have to reinterpret SSM from the "actuality" point of view. Before attempting this, though, we first need to consider the concept of Actual Transformation (AT) and Real Transformation (RT) that I am going on to explain the next section.

3) The Concept of Actual Transformation (AT) and Real Transformation (RT) in the context of SSM

Suppose the real world situation is to be called "ba" where the "actuality" and "reality" are intertwined. How we can intervene in *ba* and learn from it in order to improve it? In responding to this question, we first need to look at the concept of the autopoietic transformation, originated by Maturana and Varela (1980). Checkland (1999, A52) also refers to the autopoietic transformation quoting Vicker's concept of the "appreciative system". From the "actuality" point of view, autopoietic transformation can be seen as the *actual* transformation (AT) which produces itself by itself in the "actuality" level. According to the previous analysis, we can separate two kinds of transformation (T), that is, the *actual* transformation (AT) and the *real* transformation (RT) methodologically (Fig. 1). SSM-based AR provides a methodology to carry out both of the Ts and a means for them to connect with each other.

In *real* transformation, the output of the transformation has to be known before the transformation can take place. For example, the transformation to produce a car is a *real* transformation (RT), in that every specification of the car as the output is already known previously and we only have to select possible input and to combine them to produce the car. On the other hand, output in *actual* transformation (AT) has to be indeterminate and input has to be determined as a virtual (latent) form. For example, the transformation involved in the evolution of the eye is an *actual* transformation that no function of the eyes were known before the eyes actually were shaped through evolutionary process, although there were a kind of needs for eyes as a virtual (latent) input. Amebas needed eyes or wanted eyes as *Elan Vital* (Bergson) without knowing any function of eyes, nonetheless eyes have been evolving autopoetically (or actualizing). Since our human eyes also are on the way of evolution, we can not know which kind of eyes will be actualized in the future.

This distinction between *real* transformation (RT) and *actual* transformation (AT) corresponds to the “*hard*” and the “*soft*” paradigm articulated in SSM. In other words, an “accommodation” (to live with different individual’s worldviews based on sharing “actuality”) cannot be *designed* beforehand, but is *shaped* in the process of SSM. With the “*hard*” paradigm, in contrast, the possible *alternatives* are examined first and the most suitable plan is chosen based on the *real* standards (Simon); then what is needed is designed and produced. In the *real* (or hard) transformation, “design” is the fundamental; in the *actual* (or soft) transformation, “shaping” (like eyes’ evolution) is the fundamental. In a conventional reform programme, such as organizational restructuring or business process re-engineering (BPR), the *real* transformation is supposedly implicit. However, the change programme might have to be accompanied by an *actual* transformation, such as a change of attitude or fundamental shift in culture. Checkland and Scholes (1999) argue that “re-orientation” is relevant to this *actual* transformation, in contrast to the restructuring or reengineering of the *real* transformation.

Relevant to AT/RT, Weizsäcker (1942) claims that *living beings* are always accompanied by indeterminism, despite obeying the natural law, but *physical things* obey the determinism of natural law. He also said that determinism is necessary to produce a physical event while, for living beings, indeterminism is an essential part of the nature of living. This also leads to differences between the two in terms of time. Physical events are non historical, occurring only in the “real” time which can be mapped on space. In contrast, the events of living beings occur in the *present* as *actuality* to bridge between the past and the future. Weizsäcker calls this kind of *present* “*zeitüberbrückende Gegenwart*”. For living beings, the process of producing themselves by themselves produces *time*, but for physical things the process of producing occurs *in* the time. AT is the process of producing events of living beings and RT is the process of producing physical things.

In the next section, we will describe how to bridge AT and RT or “actuality” and “reality”, which is the one of key notions of SSM-based AR.

4) The Theory of Biological Learning

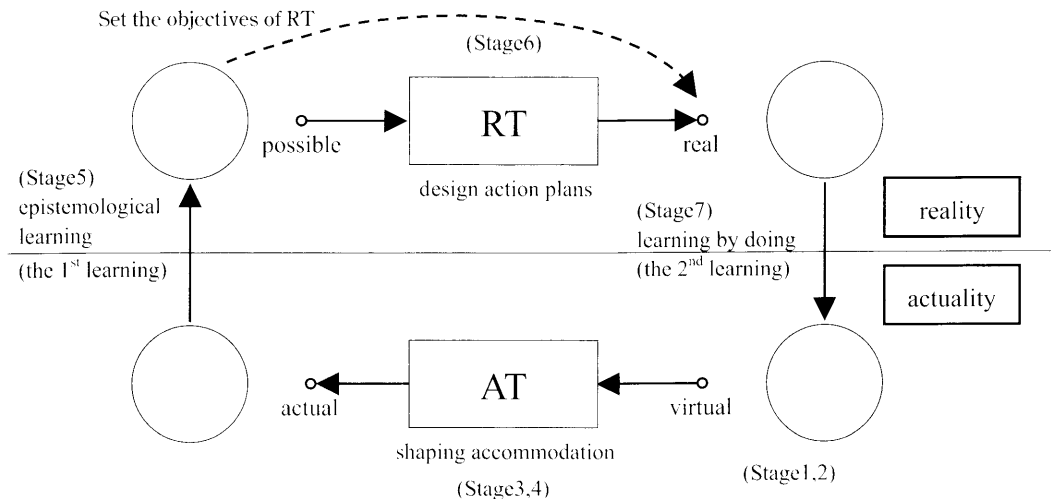
As mentioned before, the distinction between “actuality” and “reality” is even an analytical or methodological level. In practice, living beings live by pre-consciously integrating the two into one, that is, “actuality” as action and “reality” as cognition. Weizäcker (1940), whose argument is very close to Kimura’s, claimed a unity between movement and perception, or action and cognition. For example, when people chase after a butterfly by the movement of the person’s eyes, the person’s perception works at the same time. When people read a book, they

move their eyes over the text in the book, and not move the book in front of their eyes. However, while movement and perception, or action and cognition, are in a relationship of mutual concealment from one another, we cannot recognize action that enables us to recognize during the recognizing, and we cannot comprehend the cognition found in the action which acting. Therefore it seems to us that action and cognition belong to different levels.

However, integrating the two does not follow a simple-like symmetrical relation. “Actuality” cannot actualize by itself. “Actuality” differentiates itself through the moment of “reality”. This is the process of self-differentiation of “actuality”, that is, the difference between “actuality” and “reality” itself is “actuality”. Kimura (1997) explains that such a difference between “actuality” and “reality” is the difference like that A is the difference between A and non-A, and this relationship does not obey “Aristotelians’s law of the excluded middle”. In this sense “betweenness” is not between two things but “between” itself. For example “here” is not between forward and backward, and “now” is not between past and future (today is not between yesterday and tomorrow), but “here and now” is “here and now” itself. Thus Kimura calls this difference “biological differences” or “betweenness” (*Aida* in Japanese). What we are living is an autopoietic process of self-differentiation, as “actuality” has been endlessly (both continuously and continually) maintained. To “live” is to bridge “reality” as a recognizable fact of the past and the “actuality” as action in the present. In other words, “actuality” is the presence to bridge between the past and the future.

SSM is a trial in rethinking this view of living analytically and methodologically. That is, SSM is a methodology to consciously carry out the integration between “actuality” and “reality”. A key notion of SSM is to facilitate self-differentiation of “actuality” through the moment of “reality”. Therefore it is an essentially self-producing (autopoietic) process. The learning in SSM is a learning of self by reflection *in* action, namely “actual learning”. This kind of learning can happen when we bridge “actuality” and “reality” in the process of SSM where “actuality” encounters “reality” (called “ba”). However, we can distinguish two kinds of learning in “ba” methodologically: one is the learning by bridging in the direction from “actuality” to “reality” (the first learning or learning by seeing) and the other is from the direction of “reality” to “actuality” (the second learning or learning by doing). (Uchiyama 2003) (see Fig. 2)

Fig.2 SSM as the connection between AT and RT
(corresponding 7-Stage Model in SSM)



In the process of SSM, we can obtain learning by the encounter of “actuality” with “reality” through the model, which is an expression relevant to “actuality”. The model is used as a lens to look into the “reality” of the real world. In doing so, we can obtain “epistemological learning” from the difference between “actuality” and “reality”. This can be formalized as “the first learning” in SSM in the direction from “actuality” to “reality”. It is learning gained by “the epistemological difference” between “seeing (“actuality”)” and “what was seen (“reality”)”.

From a methodological point of view, the more pure the “actuality” point of view is reflected in the model, the better the learning can be gained. This is important because the freshness of the learning is easily lost due to the blending of actuality with reality. The real world can be seen with “actuality” depending on our actual concern with it. The purer the concern, the fresher the learning is manifested. Without actual concern, the real world only becomes a set of data. Whether the data can be seen as meaningful information depends on the frame of reference as a model which expresses “actuality”. For instance, travel data about Europe remains as only data for the person who wants to go to America. However this same data becomes information for the person who plans to go to Europe this summer.

The other kind of actual leaning is “learning by doing” which is occurs in stage 7, or the stage of “carrying out the action plan(s)”. When we carry out action plans based on the “epistemological learning” in stage 5, we can obtain learning by doing even if we failed. This is a process to internalize tacit learning from the direction of

“reality” to “actuality”. Thus, we can formalize “the second learning” in SSM as the learning from “ontological difference” between “doing” (“actuality”) and “what was done” (“reality”), in the direction from “reality” to “actuality”(see Fig. 2).

These two kinds of learning as duality are the two sides of the coin of “the biological learning” based on “the biological differences”. The relationship between the two types of learning is not simple enough to be able to draw as a figure on paper. The relationship is a more complicated topology. Despite the complexity, however, we dare to summarize these discussions as in Figure 2, contrasting the conventional 7-stage model of SSM (Checkland et al., 1999, p.27). As Checkland says, both figures are not a linear procedure of methods but the structure of the methodology, and take into consideration the complicated characteristics of situations.

5) The SSM Model and the Process of “Accommodation”

One of the main contributions of SSM as a methodology (that integration of “actuality” and “reality”) is being able to devise a model that is an expression relevant to “actuality”. Checkland (1999) states that SSM model is a purposeful activity model that expresses a purposeful activity system. In this context, a purposeful activity system is a *ba* that as a system intertwines “actuality” and “reality”. So the purposeful activity model can be thought of as an expression relevant to “actuality”. However, this kind of model is difficult to understand for those of us who have been influenced by modern positivism. The model of SSM is neither a descriptive model of the real world nor a normative model for interpretivism. It is just an epistemological device for gaining actual learning from the real world. Although alike the Max Weber *ideal type*, more precisely, the SSM model expressed “actuality” in “ba” is not a representation of “reality” in any sense but a “tool” through which we can get the actual learning.

In practice, when we shape a model as a Root Definition in SSM through the process of accommodation, we have to express it as a predicate (verb) without a definite subject. In this case, the subject is a topic or *topos* in the Aristotelian sense or “ba” in the wider sense. We cannot define the subject itself because it is this subject that we are looking for in the SSM process. Therefore, we would ask participants in a SSM workshop “how the situation can be seen (felt).” Participants, for example, would answer, “(the situation) can be seen as carrying out a movement for liberation” or “as committing terrorism by suicide.” There can be any answer relevant to the “actuality” in the real world. Or we cannot ascertain a correct answer in the “reality” sense because the answer is never a representation of the real world. We can only estimate it from an “actuality” point of view through a process of accommodation; that is; which answer is purer expression of our shared “actuality”

of the real world. The standard of the good model is not covering the reality of the real world such as the model of positivists. However, the purity relevant to “actuality”, which facilitates the process of accommodation, is very important. We can obtain shared “actuality” through an accommodation process that is the actual transformation (AT) I have already discussed in a previous section. A more precise meaning of accommodation, therefore, would be to live with different individual worldviews *based on a shared “actuality”*.

Let’s take kimura’s “Music Example” (Uchiyama 2003, pp.89-90) to explain accommodation from “actuality”. The gist of the music example is that we play music by creating sounds in real space, but cannot continue to play without also listening to the *music as a whole*, which includes sounds from the past, present and future. While we are absorbed in playing the music, we are usually not aware of both creating sounds and listening to sounds consciously. When some kinds of breakdown occur, such as notes out of tune or a loss of tempo, we realise ourselves that we are playing music and correct these disharmonies. However, with skilful players, this correction has been done preconsciously while playing music. If an unskilful player tries to correct these disharmonies by focusing too much on creating sounds and listening to sounds, she or he will become confused and the musical performance will collapse.

In order to play coherent *music*, we have to maintain the connection with the *music* through action (playing *music*) and cognition (listening to *music*). *This music* sounds *between* the player and the space in the abstract anonymous locale (*Aida*) I call “*actuality*”, not a real or physical place. Moreover, such an abstract place is shared by other players on the *actuality* level. If we play music together coherently, we should simultaneously reside in the “*actuality*” that enables us to play music as a whole.

Accommodation means to look for “actuality” which is shared among people who participate in the AR *workshop*. The “actuality” can be found in the way “People *as someone* comprehend the situation *as something*.” In the example of music, people listen to notes not only as something (as music) but also as someone. The key point of accommodation is to comprehend the situation both as something and as someone. Thus the “Music Example” draws a good example of accommodation.

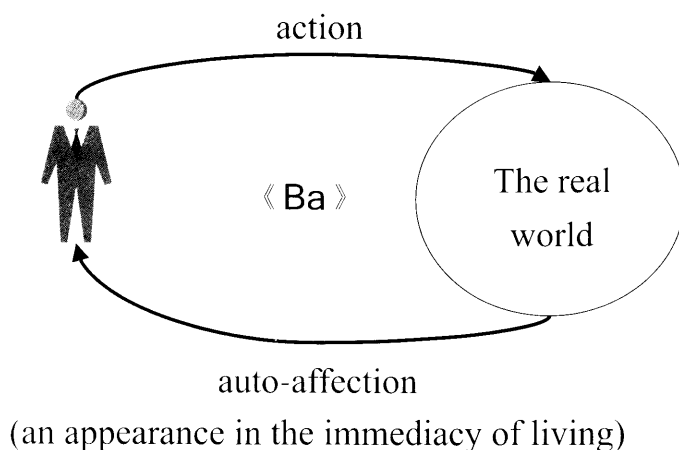
6) Michel Henry’s “Auto affection” and Kimura’s “Actuality”

Then, how do we deal with “actuality” in the SSM based AR? The key to do this is given by M, Henry, the radical phenomenologist, who devised the concept of “auto affection”.

Action research is not the research *of* action but research *concerned with*

action. Action research is intervention with the real world. Our concern in the real world in action is as the first person, rather than as a third person (observer). When we are concerned with the real world in action, something *actual* appears to us. Henry (1993) calls this *a manifestation in the immediacy of living*, a pure auto-affection of appearing to us without any representation or distance (see Fig. 3). Therefore it can never be cognition or perception. For example, just say some people encounter a car accident on their way to work. Someone may just look at the accident and pass on by. Another person may call for an ambulance. The last person, however, may give first aid to the people who were injured. In following my argument, the person who was actually concerned with the real situation in action is the last one. Because of the first person's intervention, there ought to have been something felt that appeared to him.

Fig. 3 Henry's «auto-affection»



Henry (ibid, p.20) states, in the Cartesian's Second Meditation "It seems to me that I see ..." does not mean "I think that I see". As Ferdinand Alquié justly remarks, "Descartes does not mean that he is uncertain of seeing, but of *thinking* that he sees. What he affirms is not the reflective consciousness of seeing, but the text bears out : "It seems to me that I see, that I hear, that I warm myself, and this is properly what in me is called sensing (*sentir*), and this, taken precisely thus, is nothing but thinking."

In our context, as mentioned before in the section(2), in the sentence, "It seems to me that I see...", the "me" indicates the *actual self* and the "I" indicates the *real self*. Thus, Henry's auto affections namely "It seems to me" can correspond to Kimuras "actuality". We would like to express this "something felt which appears to us" into some form. Although this form may take on patterns such as the

XYZ formula in SSM or the more poetic form of 5-7-5-syllable of Japanese Haiku, the expression has to express “actuality”. However, pure “actuality” is not the conception of each individual (someone) but a kind of common sense in the same culture (as someone). Thus we need accommodation to look for the pure “actuality” in the AT process in SSM-based action research. Therefore, in the process of accommodation or AT, we should not pursue a discussion about facts (“reality”) (the type of form a debate takes on), but rather work on open *deliberation* (Faj 2004). Very interestingly, by taking enough time (usually two to three days in a SSM workshop), participants can suddenly reach accommodation among those who share a same culture, such as those who work for the same company.

Mizushima (1991, p.123), for example, reports, “ ... from our experience of SSM, intriguingly, a certain accommodation often comes suddenly in the process of discussion guided by SSM. The discussion, which has been producing a great deal of noise but little forward motion, suddenly progresses by some member’s proposal of a new view. At that moment, every member of the meeting can obtain “*accommodation*” almost simultaneously, and can be vocalized with expressions like “we got it!” or “it’s OK”. It is like the feeling when you are “suddenly brought to (your) senses.” (translated by present author from the original Japanese). In this case participants did not compromise someone’s view but accommodate as someone, and more interestingly, we Japanese can accommodate accompanied with joy rather than compromise with pain. Senge (1990, p.235) offers another example. “I have spoken to many managers who have been members of teams that performed at similarly extraordinary levels. They will describe meetings that lasted for hours yet ‘flew by’, not remembering ‘who said what’ but ‘knowing when we had really come to a shared understanding’, and of ‘reaching a point of knowing what we needed to do’”. It is seeming to me that this moment of understanding is an example of “reflection *in* action”, not “reflection *on* action” which distinction Schon (1983) could not explain clearly. Accommodation is carried out the reflection *in* action based on *auto affection* which belong to “actuality”.

7) Action Research and SSM’s Contribution to it

Although Action Research has been thought of as an attractive research methodology for those who have felt the limitations of scientific positivism, there still remained some problems from a rigorous academic point of view. For example, a paper, written by a researcher who visits Africa and writes about her or his reflections, would be treated by some in the research community as merely a non-fiction type novel. The where, when and how the research accounts (reflections) could be obtained is not explicit in the discussion to the public in this type of

account.

It is only the direct participants of AR who can sense improvement of their own experienced-based knowledge after finishing one cycle of AR. People who did not participate in the particular AR are unable to share in the actual learning from the AR publicly. This is similar to how it is not possible to transfer the “actuality” of a chess game to others with the same sensation as the participants experienced. Since the knowledge which action researchers try to look for is one based on experience, they are not concerned with scientific knowledge (which is universal and objective, that is, the knowledge that is characterized “by the same results that occur anywhere at anytime, and for anyone”). Human phenomena, however, are not repeatable in the sense of “reality”.

SSM-based AR tries to overcome this problem by using a model relevant to “actuality” as a “trace” of the actual process of AR. SSM-based AR proposes the “recoverability” of “actuality” as a rigorous academic standard, compared with the “repeatability” standard of the positivists (Checkland and Holwell 1998). This means that even if the “actuality” of AR cannot be repeatable, the trace of “actuality” of AR can be present in the model relevant to “actuality”. It can be said that the recoverability of “actuality” might be the repeatability in the sense of “actuality”, such as history is repeatable in the sense of “actuality”. We can therefore connect the where, when and who of the procurement of actual learning in the process of SSM. In other words, we can maintain the “traceability” of the accounts of AR through the model used in SSM-based AR. By doing so, we can discuss openly in public the account of the AR. In this way, we are still able to maintain the “public characteristics” (publication) of the AR account, even having given up objectivity and universality. This will be discussed in depth in the section(8).

* * * * *

Let's look at a comparison table of AR and positivism based on the well-known scheme of the PDS (Plan, Do, See) cycle (table 1).

Table 1 Comparison between Positivism and SSM-based Action Research

	Positivism	SSM-based AR
P	Hypothesis (The model of "reality") Experimental Design	A <i>Omoi</i> Model A model relevant to "actuality" Action Plan
D	Observation Collection of data	Carry out Action Plan Learning by doing
S	Verification	Reflection <i>in action</i>
Kind of Knowledge	Scientific or Explicit knowledge	Tacit or Experience-based knowledge
Standard of Validity	Repeatability	Recoverability

The main characteristic of positivism is the verification of the hypothesis (the model of "reality") in order to obtain scientific knowledge, while for AR it is reflection *in action* in the row of "S" in order to obtain tacit or experience based knowledge. To do this, in positivism we develop the model of "reality" as a hypothesis then design an experimental plan, while in AR we shape a model relevant to "actuality" (a *Omoi* Model) through accommodation and design an action plan based on the first learning which is given from the difference between the model and "reality" in the row of "P". Thus in row "D", in positivism we carry out the experimental plan, observe the results, and collect the data, then we can find whether the hypothesis is "Yes" ("true") or "No" ("not true") in row "S". If "No", we have to go back to phase "P" or create a new model of "reality". If "yes", we can contribute the hypothesis as scientific knowledge to the collection of human knowledge. On the other hand, in AR we carry out the action plan in the real world by ourselves as planners in row "D", then we can reflect *in action* in row "S". Irrelevant if the result of the action is successful or not, we can obtain learning by doing (the second learning), and then we can internalize this learning as experience-based knowledge.

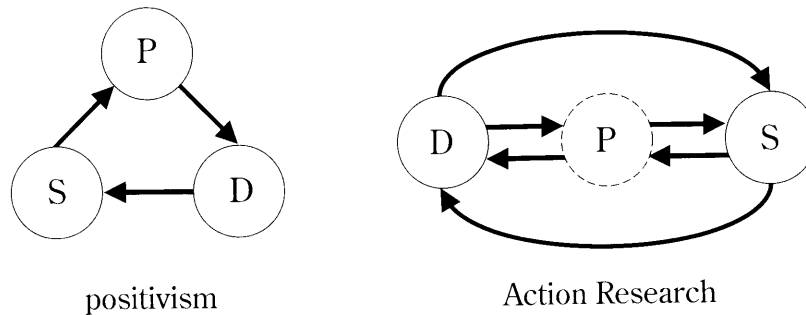
As a whole, it is the different role of each model that is important. For example, we may see a scene in which tourists point out the Westminster exclaiming, “that building, Westminster is splendid!” comparing it to the exact same photograph displayed in their guidebook. Is this actual learning? What they are doing is making sure that the photograph of Westminster is the same as the real Westminster they are observing. This is a typical positivists’ manner.

In contrast, the group of Japanese *Samurai* officers of the new government who went on a grand tour to Europe and America in the beginning of Meiji Era (1871-1873) had imagined, before their departure, their own conceptual picture of the political institution of the West. Thus when they encountered the Westminster as the real political institution, they could obtain actual learning from the difference between their previous image of Westminster and the real one*. The image of Westminster is not necessarily the same as the real one, but they could obtain actual learning from the difference between the two. The “real” model, such as a photograph, which is a map of the real world, cannot facilitate actual learning. We can only make sure it is the correct model to map the “reality” of the real world. Thus, positivism cannot obtain actual learning principally in the process. Positivism can only obtain data through observation as the third person.

* In the summer of 2008, Bill Torbert who is professor of management at the Carroll School of Management at Boston College suggested to the author, “In the case of Westminster what is compared with the model of SSM is the *actual* political situation, is it?” It was a quite right question. However, in our context, this “*actual* political situation” is methodologically “the *real* one” in the sense of what is seen by perception. Because the political situation of Westminster was an object from the *Samurais*’ point of view. They were not familiar of British political system at that time, so they could not see that *actually*. “Actuality”, in Kimura’s sense, does not mean any perceived object or event. “Actuality” means only on going process experiencing for participants in the situation (*ba*). (In the discussion in the *International Conference of Action Research* at the University of San-Diego. 2008.)

As consequence the following two modes of different PDS cycle will be shown, that is, PDS cycle for positivism and for AR (fig. 4).

Fig. 4 Two modes of PDS cycle



In the positivism model (the left side of the Fig. 4), three phases of PDS are strictly divided and each phase is closed by itself. For example, it is desirable that each person who makes plans, who commits examinations, and who evaluates results is not the same one to keep objectivity of the research. In this case, “P”, a hypothesis of the research (the model of “reality”) is important because if it is verified, it becomes the scientific knowledge itself. In contrast in the case of AR (the right side of the Fig. 4), action researchers do not make a model like a hypothesis in phase “P”. They accommodate a model expressed by their “actuality” and use it as an *epistemological device*. The role of the model is a tool for actual learnings. The important thing is not the model itself but the process to obtain learnings from the interaction between “D” and “S” using the model as a medium between “D” and “S”. In other words, as “P” is, in a sense, the drift of the autopoietic process of AR, the experience based knowledge is embodied in the process of interaction between “D” and “S” at the tacit level. Therefore, the persons who conduct “P”, “D” and “S” have to be the same ones. As mentioned in section (1), the Japanese way of QC management is a case of this type of the PDS cycle.

8) Validity and Legitimacy of SSM-based AR

The problem of validity and legitimacy of AR is controversial. I will show a solution to this problem by introducing the concept of recoverability of “actuality” as opposed to repeatability of “reality” in positivism. At the same time I will also suggest guidelines for writing an AR academic paper.

The validity of research is commonly understood to be constituted from the validity of the knowledge obtained by the validity of the methodological process

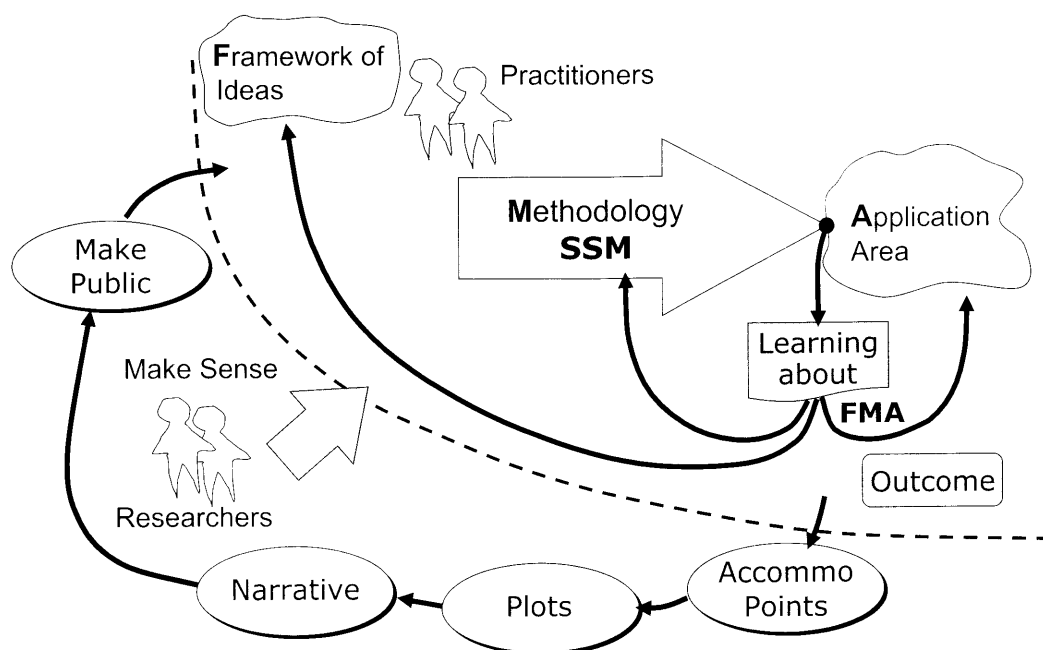
to procure the knowledge. In the positivism, the researcher sets an hypothesis (model of “reality”) in a pure “reality” void of “actuality”, verifies whether the model accords “reality”, then if verified, the model (hypothesis) becomes part of in the data-base of scientific knowledge. In these terms, the standard for the validity of knowledge becomes objectivity and universality (independent on who, when and where). In other words, in positivism “actuality” is take out from the process when formulating the model and verifying the model in order to be able to achieve the standard of objectivity and universality. In this case, the answer of the verification can be only yes or no (truth or false).

In positivism there is the strong assumption that a unique truth exists in the real world and it can be verified. Because, if not, such a methodology principally becomes nonsense. Bhasker, who claims critical realism, denies assumptions at the experienced level, but rather sees the mechanism, power and tendency namely the *reality* in his sense as the truth. It is sense of *reality* that underlies immediate experience as a latent existence (Bhasker 1989 in Winter and Giddings 2001, p.261). It could be said that Bhasker, in a sense, criticizes the methodological validity of positivism, that is, positivism try to verify the apparent truth at the experience level by the methods of scientific experimentation. Critical realism asserts that while we have no option but to assume the existence of objective reality, our knowledge of it is destined to be forever ‘fallible’ (Collier, 1994, p.16,50 in Winter and Giddings 2001, p.259) Thus, Winter and Giddings (2001, p.263) note that although critical realism is a model for inquiry in general, it also seems to be generally compatible with the values and processes of action research. They place action research as an inquiry process to understand the existent *reality* such as mechanism, power and tendency which are latently beneath our experienced world. However their claim also enter into the point that the standard of the validity of the knowledge is objectivity and universality of the existent reality as long as they accept the existence of the unique truth even in the latent level.

In the case of SSM-based AR, our standpoint is that we do not know whether there is the system (mechanism) in the real world or not even in the latent level, but we can embody ‘systems’ in the process (“actuality” in Kimura’s sense) to inquiry of the life world. Therefore, we do not think about the repeatability in the “reality” level based on objectivity and universality as the standard of validity of knowledge in AR. We make a question of validity in the process of ‘learning by doing’ or ‘experiencing’ which belongs to “actuality” in Kimura’s sense, which is completely different from Bhasker’s sense of *actuality* that means events. In other words, the problem of validity is the question of how to connect the experiencing (“actuality”) and the knowledge (“reality”) obtained by it, and the relationship between them. As

the source of learning is an auto-affectation at the “actuality” level in our context, the standard of validity of the research as methodology is that we can discuss *publicity*, that is, when, where and how we can obtain learning based on auto-affectation in the process of research. For this purpose, the process to obtain learning in AR have to be able to be *recoverable*. It is a model that expresses “actuality”, that is the means of the *recoverability*. We can make the process of AR, which is principally unable to be repeated, *recoverable*, tracing it by means of the models or “accomo-points (points of accommodation)” which are accommodated by the participants of SSM.

Fig. 5 Reporting the SSM-based AR



In summary, the researcher makes sense of the process of AR and public by presentation of this learning in order to recover the “actuality” of AR, composing a narrative through the “accomo-points” as plots (Fig.5). Consequently, in AR we can reserve for the public level open discussion and share the experienced knowledge among people who attend the presentation, in contrast to positivism which attempts to objectivity and universality. In other words, AR radically questions the validity of the process itself (“actuality”), while positivism questions the knowledge itself (“reality”). It could be said that the question of validity in AR is based on *recoverability*, which can be replaced for *repeatability* of “actuality”, while in positivism it based on *repeatability* of “reality”.

Thus, the legitimacy of AR is rooted in “accommodation” which means in a

sense “common sense” (based on Alistoterian *Koine aisthesis*) in the actuality level among people (*Aida* in Japanese), while in contrast to that of positivism and critical realism which is rooted in the existence of the unique truth. In other words, there is the difference of *die letzte Instanz* of the legitimacy in research which ultimately leads to obtaining to the “truth of God” or approached in a different way is about “common sense” among people (*Aida*). I would like to add that this corresponds to Vico’s methodology (Vico, 1990) which is strongly against Descartes’ rational knowledge *critica* and claimed *topica* which was the common sense based knowledge. It seems to me in our context that Vico asserted “actualism”, while Descartes claimed “realism”.

9) Conclusion- From “Realism” to “Actualism”

This paper has positioned Kimura’s “actuality” within the core discussion of AR. Therefore, in Checkland’s SSM the initial question of “how can the real situation be seen (felt)?” is interpreted as the real world which is appearing to the actual self, that is, the “me” of “it is seeming to me that I am seeing the real situation”- namely the Cartesian *Videre Videor*. In other words, it is the “manifestation in the immediacy of living or the “auto-affection of appearing to us” in Henry’s sense. The question of both the “manifestation in the immediacy of living” and the “appearance of actual self” is the two sides of the same coin. However, Cartesian’s *cogito* as commencement of both self and the real world as appearance has been replaced by those in the scientific community with representation. Scientific positivism is the extreme form of that replacement and thus it has been neglecting the dimension of “actuality”, which is the manifestation in the immediacy of living by attaching the real world, by detaching it in order to maintain scientific objectivity.” Henry (1987) asserts this attitude as a new barbarism of modern science. If Action Research is not the research *of* action but the research concerned with action, it should be research relevant to “actuality” as the manifestation in the immediacy of living *concerned with* the real situation.

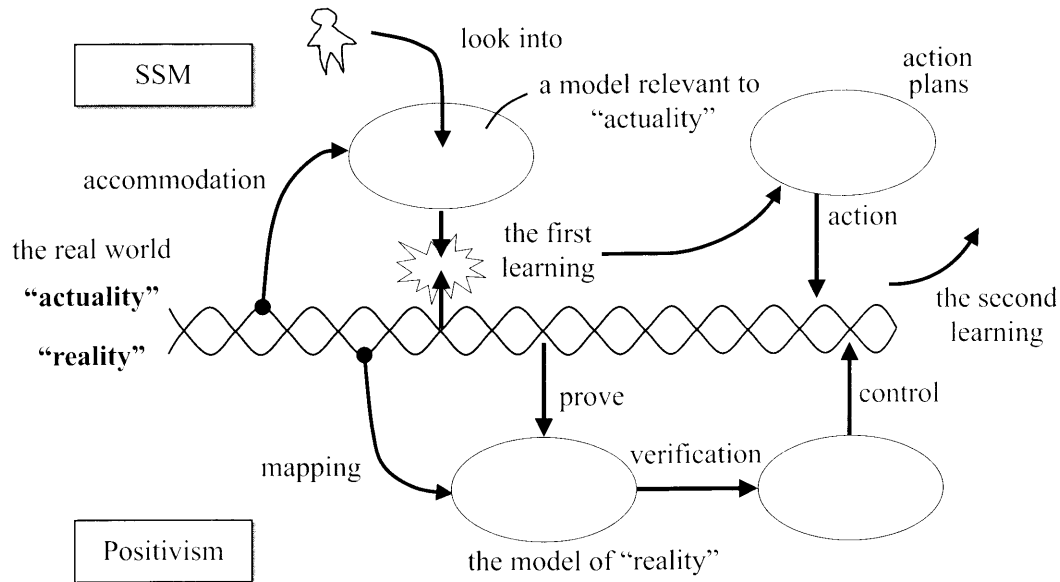
In our modern world, it is only explicit scientific knowledge that dominates academia and journalism. This domination comes from eliminating the other knowledge of the tacit. People are contaminated, as it were, by “depersonalization”. For example, there are many who approach IS (Information Systems) as a “reality” from a technology point of view. In contrast, there is only a limited literature about “the system to use IS” as “actuality” because we do not have an appropriate methodology to deal with “actuality”. Also, issues in “virtual reality” in cyber space lack the crucial dimension of “actuality” as a “feeling of reality” (Dreyfus 2001). SSM is the methodology to try to deal seriously with this lost dimension of “actuality”

with rigorousness.

The theoretical foundation for AR needs to be based in a SSM which is reinterpreted from the “actuality” point of view (Uchiyama 2003). SSM-based AR tends to introduce “actuality” in the wider sense of management.

A comparison between the AR and Positivist frameworks is shown as the summary of discussion of this paper (Fig. 6). This comparison may also demonstrate a paradigm shift from “realism” to “actualism”.

Fig. 6 SSM (Action Research) and Positivism



SSM: Researchers shape a model relevant to “actuality” through the process of accommodation, then, obtaining the first learning from the difference between the model and the “reality” of the real (life) world. Based on the first learning they design action plans, and obtain the second learning by conducting action plans. They go to next cycle of SSM, at the same time, the situation will be changed by their action. Also their “actuality” will be changed by their learnings. (see Fig. 2)

Positivism: Researchers make the model of “reality” by mapping the “reality” of the real world through the process of careful observation, then prove identification between the model and the “reality” from examination. If it is verified, they obtain the knowledge of “reality” to control the real world, or if not, they remake the model of “reality” to prove it again.

As positivism is only based on “reality” without “actuality”, while SSM-based AR is based on both “reality” and “actuality”, it seems to me that the way of positivists is that of patients of “de-personalization” who lose their “actuality”.

Note: This paper demonstrates SSM-based AR reinterpreting Checkland’s SSM from the Japanese cultural point of view. Therefore, some concepts are originated from Japanese such as *Koto*, *Mono*, *Omoi*, *Aida* and *Ba*. It shall be useful to explain them in English.

Koto/Mono is a set concept which is interpreted as “actuality”/“reality” in this paper’s context. As the life world are intertwined by *Koto* and *Mono* or “actuality” and “reality”, we can say that *Koto* or “actuality” is an active side of the world and *Mono* or “reality” is a cognitive side of the world. *Koto* literally means events and *Mono* means things. However, I use these words in a very special meaning (in Kimura’s sense) in the context.

Omoi, *Aida* and *Ba* are concerned with Henry’s “auto-affection”. *Omoi* literally means affection, *Aida* means betweenness and *Ba* means place. Therefore, we can say as follows: “*Omoi* is appearing to us from between (*Aida*) self and the world in *Ba*”; namely, “An auto-affection is appearing to us on the place between self and the world.” In this paper the word *Omoi* is one of the most important key words because we use it in the “actuality” level, such as *Omoi* model. *Omoi* Model means a model expressing “actuality”, therefore, in a sense, *Omoi* belongs to “actuality”. We can say also *Aida* and *Ba* belong to “actuality” as well. So, *Aida* is not the same as betweenness, and *Ba* is not the same as place in the “reality” sense. Japanese usually use language not as vehicle of meaning but as expression of “actuality” (*Omoi*).

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