

METASTRUCTURES OF FEDERATIONS: ANALYSIS OF CONSEQUENCES AND SOLUTIONS.

Andreas Schneider^{1, 2*}

1. Department of Sociology, Anthropology and Social Work, Texas Tech University, 2500 Broadway, Holden Hall 159 Box 41012, Lubbock, TX 79409-1012.

2. Fulbright Scholar at Burapha University, Chon Buri 20131. Thailand.

ABSTRACT

The European Union (EU) was recently plagued by economic disasters, violent protest of citizens, and an increasing inability to act independently from the interests of the international banking system. This has led to widespread pessimism about the benefits of large multinational federations. First I developed a dynamic model that allowed for the investigation of the interplay of agency and structure in a globalized system. The luxury of hindsight allowed me to indicate the major causes for the problems currently faced by the EU: overregulation and the consequent inability to adjust to global change. I showed how such overregulation had led to unanticipated consequences of growing structures, loss of resources, rigidity in the structure, and a loss of vision. Learning from the mistakes of established federations of nations provides potential solutions for the Association of Southeast Asian Nations (ASEAN), a federation that is still generating its regulatory body.

Keywords: Globalization, ASEAN, European Union, agency and structure, symbolic interactionism, cybernetics.

*Corresponding author. E-mail address: andreas.schneider@ttu.edu

INTRODUCTION

Nothing is more stable than change. While some might be uncomfortable with change and look for the explanation with static views of the world, these times seem to be over in sociology. Structural approaches (Darendorf, 1965; Homans, 1961; Linton, 1936; Merton, 1949) provided rigid descriptions of rules that organize individual behavior. Individual approaches (Blumer, 1969; Garfinkel, 1967; Goffman, 1959; 1963), in contrast, explained how these rules are implemented, challenged, and changed by individuals and groups. Purely structural macro perspectives used by the founding fathers of the discipline were challenged by micro perspectives that saw human agency as the determinant of social structures. Early Blumerian (Blumer, 1969) symbolic interactionism was such a landmark. Notably it was the symbolic interactionism perspective that took the recursive relationship of agency and structure into account (Heise, 1987; 2007; Heise and MacKinnon, 2010; Schneider and Heise, 1995; Stryker, 1980; Stryker et al., 2000). This developed into a perspective that we now call cybernetic symbolic interactionism (Schneider, 2011).

At about the same time as the cybernetic symbolic interactionist approach evolved, Anthony Giddens developed his theory of structuration that was based on his early ideas of recursive modeling (Giddens, 1979). While both approaches, cybernetic symbolic interactions and structuration, took recursive relationships into account for their dynamic modeling, they could not be more different in their application. While cybernetic symbolic interactionism approaches like Identity Control Theory (ICT) (Burke, 1991), and to an even larger extent Affect Control Theory (ACT) (Heise, 1987; Heise, 2007; Heise and MacKinnon, 2010), are fully operationalized empirically, structuration theory is an abstract theoretical framework that allows for the generation of ideas. Structuration, hence, was often used for abstract philosophical interpretations of social systems and especially the influences of globalization. Empirically interested researchers generally stayed away from structuration theory. So

it was not surprising that cybernetic symbolic interactionists and followers of structuration never really mixed.

A model that explains the rise and developments of federations has to take agency into account. More yet, it has to accommodate ideas of sociology, social psychology, and psychology. In my conceptual framework – the triangle of social sciences – I allow for the interplay of sociological, social psychological, and psychological models (Fig. 1). The triangle of social sciences is organized on a continuum from the concrete one-on-one relations we encounter in psychology to the most abstract entities of institutions, the home turf of sociology. Right in between these extreme levels of abstraction I locate social psychology, with its concern in group dynamics.

While in the history of social psychology there was always the discussion of to which side social psychology ought to lean (House, 1977; Stryker, 1977), I see social psychology as a medium ideally suited to connect the abstract to the concrete. Like hypothesis connects abstract theories to the concrete empirical reality, the social psychological perspective allows for the consideration of interplays between structure and agency. Contemporary social psychological cybernetic symbolic-interactionist approaches (Schneider, 2011) generally allow for such interdisciplinary cross-fertilization.

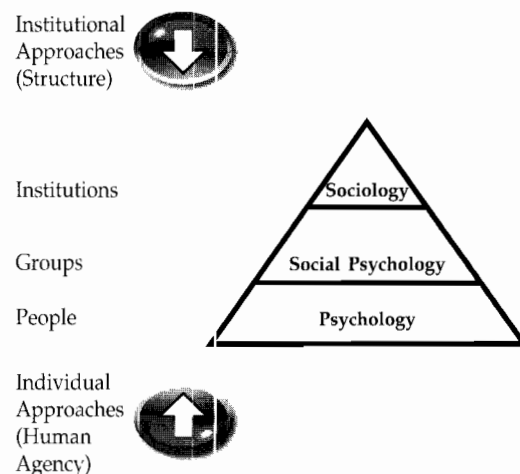


Figure 1. The triangle of social sciences.

A recursive model in which structure restricts or enables actors and actors change structures can be seen as a social system. While this is in principle true for cybernetic symbolic interactionist approaches as well as for structuration theory, structuration emphasized the system-related terminology widely used in the description of national and international relations. The second reason I stayed here with my model and with the language of structuration theory is its wide application in the field of globalization (Giddens, 1990; Hutton and Giddens, 2012).

Anthony Giddens, director of the London School of Economics and former adviser to Prime Minister Tony Blair, uses recursive modeling in his theory of structuration. Integrating the schools of agency and structure, he sees both the structuring influence of institutions on individuals and the human agency involved in the construction of institutional structures. Setting this dichotomy in a recursive model, he demonstrates the mutual interdependence of structure and agency, makes this interdependence observable and explainable, and overcomes the chicken-and-egg problem of primacy.

The duality of structure reflects the interaction between actors and structure. Structural modalities emerge in that interaction and serve as resources for action. In this interaction, rules and resources are created, structural modalities that in time become the basis for further interaction. Giddens' idea of modalities carries aspects of Goffman's (1986) frames that structure interaction. I tend to see modalities or frames as temporary truths on which people base their actions. Giddens' modalities, Goffman's frames, and my idea of temporary truth reflect a much more agency-based model of society than the traditional structural school in sociology that see norms and roles as structural properties determining social interaction.

Globalization provides infrastructures and shared cultures (meaning) for a communication that has changed the rules of engagement for the interaction of structure and agency. Modern communication

techniques are used by individuals to reshape structures. The Arab Spring was one prominent example of how people used social Internet networks to organize their agency and to break rigid structures. Holding on to rigid structures are ideas of the past where the power of governments rested on domination, exploitation, war, and genocide. Accepting citizens as competent negotiating partners that help to shape the rules of engagement helps to break the rigidity of structures and the potential for conflict. Democracy is one way, but not the only way, to create systems of governments that accept that Truth is not spelled in capital letters, but small ones, and that there are multiple truths. Temporary truths can be established in any system that allows for tolerance. Comparing Thailand to Malaysia, for example, Thailand is much more tolerant than its neighbor in allowing the participation of religious minorities. This form of tolerance was probably the reason why Thailand was able to avoid the scale of wars and genocides endured by its neighboring countries.

METHODOLOGY

Developing a conceptual framework

Metastructures of federations. Describing how (a) agency, (b) structures, and (c) the modalities of agency-structure interactions influence social systems, the ABCs of structuration theory provided an analytical tool to describe the process of globalization. These ABCs of structuration could be used in describing the process of an emerging globalization. If we, however, took globalization as inevitable—as already stated by Marx (Marx and Engels, 1848)—we could reverse the causality of the argument and state that globalization would influence agency, structure, and the modalities of agency-structure interactions. In this reasoning, I turned around the way structuration theory was generally used and assumed that globalization would influence social systems, structure, individuals, and the way individuals interacted with structures (Fig. 2).

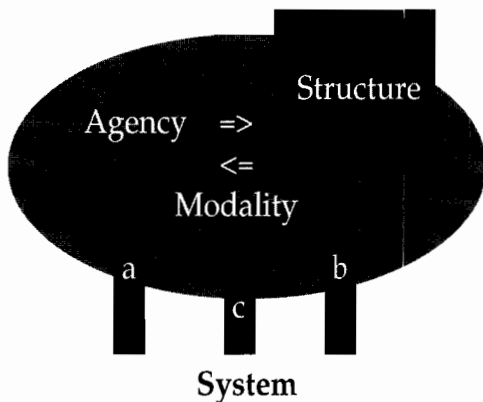


Figure 2. Inverse structuration: globalization influences social systems, structure, individuals, and the way individuals interact with structures.

The concepts of modalities or frames, which I preferred to call temporary truths on which we base our actions, reflected the idea that while humans would object to rigidity, they long for stability that provided them the comfort of habit. We wanted to be able to choose what was true, we resisted the challenge of our truths, but also we wanted to be able to change what was true to us. This pragmatic (Cooley, 1902; Mead, 1922; 1927) treatment of truth was the reason why rigid structures would never satisfy us and why there was nothing more stable than change. Structures were in constant evolution and those who determined the criteria of selection were the agents of power. If nations determined the fate of federations, they were not just structures, but become agents engaged in modalities with metastructures.

In an open global environment where people receive resources (ideas and infrastructures) from the world outside their nation, the key to survival for structures is avoiding rigidity. Globalization is happening—resistance is futile. This is not new, and Karl Marx already explained the inevitability of global expansion as an inherent principle of capitalism. The stronger the efforts of maintaining rigidity, the more likely will agency organize itself (modality) to challenge structure.

Assuming that globalization is inevitable and that it happens either through individual action,

changing structures or through the modalities underlying the interaction between individuals and structures, I can ask: What are the options of nations in the light of globalization? The answer is blunt and simple: Nations can either wait to be modified by individual action, or they provide structures that are accepted and, therefore, used by individuals. To hereby address the problems of globalization, nations form federations that connect their structures into metastructures that by allowing for international agency appear to be more suitable to cope with global issues. In federations the nature of modality is scaled up, from agency and structure to agency and metastructure (see Fig. 3).

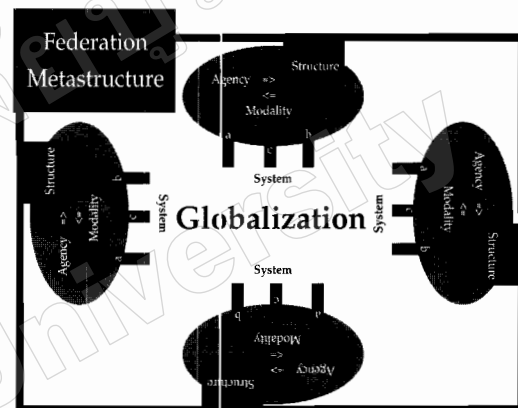


Figure 3. Metastructures of federations.

If metastructures of federations effectively addressed the problems of individuals, they would be used. If, however, the metastructures provided by federations failed to fulfill the needs of individuals, people would find alternatives and/or engage in modification of these metastructures. Such modification of (meta-) structural properties, which micro-approaches sought to explain, were always prevalent. The question was who was changing these structures and for which purposes. Global agency was often portrayed as heroic action of individuals empowered by global communication infrastructures. The European Pirate party was an example of netizens creating national and international structures. While such initiative was certainly inspiring and fundamentally democratic, I was not as naive to

assume that individuals generally used a democratic process to change structure and to provide equal access of individuals to modern structures. I would rather take it for granted that individuals act on the basis of maximizing their profits while restricting others from the means to achieve the same. This assumption was not an outcome of doomsday pessimism; neither was it a call for structural control. It was rather a consideration necessary if we wanted to ensure that agency could continue using (meta-) structure in a constructive way.

Donald Black, a North American criminologist, had the idea that law could be quantified (Black, 1976). Working on the structural level on what he called "pure sociology," Black was using measures of social stratification, similarity, and physical approximates to predict deviant behavior and social control with a breathtaking simplicity. In his theories or laws he provided descriptions that in their empirical precision stood in stark contrast to what he called the "tangled verbiage" (Black, 2000) of Anthony Giddens. I combined Black's idea that law could be quantified and conceptualized as working in different directions of social strata with the social psychological perspective that stressed meaning as the basis of action. Combining ideas of structure and agency with quantifications of the law allowed me to investigate empirical issues in Giddens' abstract framework of social systems.

RESULTS

There were two major sources of problems in the EU that I would like to refer to as hardware and software problems. Hardware problems were determined by the nature of metastructures, the tendency of bureaucracies to over regulate. Software problems referred to the mistakes politicians committed by trying to deal with hardware-related problems. I focused here only on the hardware problems of the EU that I analyzed within the theoretical/methodological framework of metastructures that I developed.

Consequences of the complexity of regulations. We had to accept that nothing ever persisted, and there

was nothing more stable than change. Concepts of modality, frames, and temporary truth helped us in understanding not only the need for constant change and negotiation, but also the need to establish temporary truths that made actors more comfortable and more efficient in their actions. We sought stability in laws and regulations. The first premise accepted by all symbolic interactionists was that people acted not upon an object itself but upon the meaning they assigned to this object. While laws provided the codified rigid structure, people would act upon their interpretation of the law, and it would be their interpretations and actions that would change the law in the long run. Laws had to be understandable for citizens (including politicians), otherwise they were meaningless as a basis for their actions. Further, laws had to be flexible to be adjustable to changing demands of the environment.

The fewer laws you had, the more likely citizens would understand the law and used the law as a modality and hereby followed it. The more laws you had, the more obscured the legal system would become to the citizen. Laws then served as a rigid defense mechanism for structure, but they would not serve as a basis for action. To enforce complex laws that were neither understood nor followed by citizens would be an expensive endeavor.

The more laws that existed, the more effort would be wasted by structures to fine-tune and changed their laws and regulations. In this expensive and frustrating endeavor bureaucrats would generate an even larger body of laws just to aggravate the problem. This was the mechanism that suffocated the legislative process in the EU. The complexity of regulations in the EU made it impossible to adjust to changes in the environment. If you could not attend to small problems in time, they had a tendency to become big problems. Unable to adjust laws and regulations in a timely fashion, the EU created one crisis situation after another. Unable to act on the crises with timely legislation, EU officials used immense resources to patch the problems. If legislation was finally passed, it only increased the complexity of

regulations and hereby supported the underlying cause for the problem.

The complexity of regulations had two effects in a self-propelling mechanism. It further increased the complexity of regulations and the inability of corporate or individual actors to follow the regulations, and it depleted the financial basis for action. Resources disappeared in feeding the ever-increasing bureaucracy of the EU and, more importantly, by using resources to mask the inefficiency of the EU bureaucratic system. **Four concrete pitfalls of Europe.** The ever-increasing number of regulations had four effects that in combination eventually led to the contemporary crisis in Europe, i.e., ever-growing structures, loss of resources, rigidity, and a loss of vision.

Growing structures. Faced with problems, nations and federations called for more regulations. These regulations provided a suffocating structure that preoccupied the efforts of politicians. The fewer laws you had, the more likely citizens and corporations would understand the law and follow the law. Conversely, the more laws you had, the more obscure the legal system would become, and the less likely people or organizations would follow the law. The citizens could not understand the increased body of regulations. If regulations were not understood, they would not be followed and they would lose their original purpose.

While they lost their purpose for the people governed by federations, regulations were beneficial for bureaucrats and politicians. These regulations provided meaningful and often well-paid professional opportunities for bureaucrats. Many bureaucrats on the national level enjoy generous job protection. One way to dispose of bureaucrats was to “promote” them to serve in the megastructure of the federation. Many bureaucrats in the EU would fully accept these offers since they often provided substantially higher pay. While this practice opened new positions on the national level, it contributed to the self-propelling increase of structures. Critical citizens called this the law of incompetence.

If passing laws became a rigid defense mechanism

for the federal structures, a Kafkaesque art form for bureaucrats who increasingly were distancing themselves from the needs of the citizens, bureaucrats lost their legitimation. The absurd structures of federation would be the welcome target of ultra-right-wing politicians on the national, state, or community level. Since they were largely incomprehensible in their formulation and complexity to citizens, critique on these structures was unlikely to be an engaged open discourse. More likely such critique would serve nationalist propaganda. **Loss of resources.** Regulations had to be created, communicated, interpreted, and enforced. It was quite obvious that passing more regulations would be more expensive. What was less obvious was that the interpretation and enforcement would become disproportionately more problematic when the complexity increased. Legal efforts of interpretation sharply increased with the complexity of law. If citizens or corporations had difficulties interpreting the law, they would simply not follow it. This led to a sharp increase in the cost for law enforcement and detention. The US already capitulated and released prisoners from the California state prison system that they could not afford to hold.

Another EU stipulation drained resources, i.e., their failure to pragmatically accept one single language as a working language for all affairs of the EU. The European Commission maintained communication in three official working languages (French, German, and English). On request up to 23 official languages were provided in proceedings of the European Parliament. While such inefficiencies appeared hilarious to any pragmatic person trying to optimize the functioning of a metastructure serving a federation like the EU or ASEAN, they were a natural product of bureaucratic structures where there was only one rule, the rule of the official (Weber, 1922).

Rigidity. Structures were rigid, but nothing was more stable than change. The key to success for federations was their ability to adapt to change for which, in turn, they provided the necessary structures. The adaptation through the passing of new regulations fit the mindset of EU bureaucrats. The more regulations

that existed, the harder it was to adjust them in a legislative process and the more stubborn the ship would react to change in the rudder. The increase of regulations led to rigidity that at a point would be unable to allow timely adjustments of the course.

Loss of vision. Incapable of reacting to crises with timely legislations that could maintain a long-term vision, the EU reacted with patchwork solutions to appease the most powerful agents: the banks. Spending energy in regulatory bureaucratic procedures and being caught up in discussion and meeting to satisfy the powerful banks and other big corporate players who had direct access to politicians, the EU completely lost its vision. Whom was a federation supposed to serve? From whom did it receive legitimation in an electoral process? Yes, its citizens. However, citizens were not on the radar of the ship that was busy with maintaining itself. The captain was busy entertaining powerful interest groups on her bridge.

The iterating increase of spending for increasing structures and the repeating needed for expensive last-minute fixes that gave money to the most powerful agents led to the need for borrowing and to a financial collapse. Unable to understand the increasingly complex regulations governing the federation, slowly grasping the price to pay for the inefficiency of the federation, knowing that these payments were unfairly distributed, and realizing the inability of the federation to change, citizens would not further legitimize the federation. The effects of increasing regulations led to two consequences for the EU, i.e., an imminent financial collapse, and the loss of legitimation by its citizens. If there were a direct vote of EU citizens today asking them if they wanted to opt out of the EU, many would leave the ship. That was one reason why no member state ever held a national referendum on withdrawal from the EU. Right now, however, Britain is close to this decision and first polls are confident that the majority would vote to leave.

DISCUSSION

Framework of metastructures. Combining ideas of Giddens' Structuration Theory, Cybernetic Symbolic

Interactionism (CSI), and Donald Black's conception of the law, I proposed a theoretical/methodological framework to analyze megastructures like the EU or ASEAN. In this proposal I married some very unlikely bedfellows. However, their similarity goes far beyond the fact that they are the undisputed authorities in their respective field of specialization. Both CSI and Giddens deliver recursive models. While Giddens' model of structuration is widely used in issues of globalization, CSI is more specialized, investigating the dynamics of actors and social structure. Both CSI and Black provide the framework for sound empirical investigation.

Situated between abstract sociology and concrete psychology, the social psychological perspectives of CSI have their strength in the analysis of action, and in the interaction between agency and structure. As a positivist and structural sociologist, Black provides a strong tool in the analysis of regulations used in structures. Giddens' Structuration provides an abstract theoretical macro-level framework of systems emerging from interactions of agency and structure that can be used addressing problems of globalization. What it lacks is the empirical operationalization that allows for the investigation of its core components, agency and structure. By integrating the ideas of CSI and Donald Black, these shortcomings can be addressed. CSI provides a concrete model of agent-structure interactions suitable for the empirical investigation of agency, and Black's positivist reflections on the nature of the law add a concrete empirical model to conceptualize laws, the essence of megastructures.

Moral responsibility for nations to form federations. If nations fail to create metastructures that address issues that emerge from our increasingly globalized interdependence, individual actors will take this initiative. While some of this emerging use of communication and transportation will empower the majority of the people to increase the social good, other usages will empower a few at the cost of all others. To prevent this abuse, nations have the obligation to act. I argue that global agency was always prevalent before governments or federations

stepped in to secure the social interests on a global scale. First there was globally organized crime before there were international efforts of law enforcement. First international channels were used to funnel money away from the prying eyes of the local taxmen before banks started to trade on an international scale. And first there was illegal immigration in countries before bilateral immigration treaties were signed between these nations. Globalization is imminent, and if governments do not act globally they will be acted upon. Creating federations that regulate behavior, trade, and immigration in a way that their citizens accept it, allows governments to take an active role shaping the trend of globalization. If governments fail to do so, they have to watch their citizens (which includes politicians) using their agency to modify structures in a way that maximizes their profit. Most likely this results in governments reacting with repressions against innovative individual actions. Governments hereby generate repeating chains of repression that are hard to escape even if their rulers are forcefully removed (e.g., Iraq, Libya) by outside forces.

Simple solution: Lex Schneider. With all my critique on the hardware of the EU, it is time for me to admit that I am biased. I stand full-heartedly behind the idea of a European federation for one simple reason: The EU contributed significantly to the peace process. Even the Nobel committee recognized this in 2012. My bias towards ASEAN rests on the same reasoning: peace is the greatest gift a federation of nations can provide to their citizens.

I am confident that we can learn from the mistakes of the EU and finally address them at their core. In my analysis I identified overregulation as the central problem for the hardware comprising a metastructure. Why did we not find solutions to this problem? I think there are two interrelated reasons. First, people were thinking within the (bureaucratic) box. Second, we commit the cognitive fallacy that complex problems need complex solutions.

Opening the box with a complex model, and realizing the mistakes that had been committed in

the effort to improve or rescue the EU, I have a simple solution. I call it Lex Schneider:

“For each new law or regulation passed, two others have to be taken off the books.”

This law should be in effect until citizens and corporations are able to know their rights without consulting a lawyer for their daily operation. Lex Schneider over time reduces complexity in metastructures, it avoids the loss of resources, it helps to break the rigidity of the system, and it restores vision. Lex Schneider is simple, and it is easy to implement since it has a smooth onset that does not require radical changes. Only the effect of the law will be radical.

To curb excessive structures existing within an established federation, like the EU, one might simply apply Lex Schneider to the passing of all new regulations of the federation. If the federation is still emerging, as it is more the case for ASEAN, substituting national laws with federal laws allows growing step by step into the regulations of the federation. In this case, Lex Schneider can be applied to adjust national structures to emerging structures of federations by dropping two national rules for the implementation of one federal rule on the national level.

Both applications, one leading to a decrease of complexity of regulations in an established federation and the other in an established nation, will not only dramatically lower the cost for bureaucratic efforts, but will also dampen the negative impact of regulation. With fewer regulations, new legislation needs to consider fewer inconsistencies with existing regulations. Federations then can pass new legislation more quickly to adjust to the changing environment. The timely update of a small set of regulations avoids last-minute fixes to address problems, and maintains long-term visions.

With its simplicity, Lex Schneider stands in stark contrast to formulations of regulations by traditional federations. While this formulation might be the reason it appears radical, since it allows for slow, step-by-step change of regulations without influencing their original objective, Lex Schneider is far from radical in a political sense. While it does not

change the intent of regulations, it dramatically reduces their unintended consequences

ACKNOWLEDGEMENTS

This research was made possible through my Fulbright scholarship and teaching award. I want to express my gratitude to Supatra Supchukul, the chair of the Department of Sociology at the Faculty of Humanities and Social Sciences. Her professional care and help provided me tremendous support as a visiting scholar and teacher at Burapha University. Supatra Supchukul's active engagement not only made me feel at home at Burapha, it made the professional infrastructure accessible that led to this work.

REFERENCES

- Black, D. 1976. *The Behavior of Law*. New York: Academic Press.
- Black, D. 2000. On the Origin of Morality. *Journal of Consciousness Studies* Volume 7, No. 1-2, p.109.
- Blumer, H. 1969. *Symbolic Interaction*. Prentice Hall, NJ.
- Burke, P. J. 1991. Identity Processes and Social Stress. *American Sociological Review* 56:836-849.
- Cooley, C. H. 1970 [1902]. *Human Nature and the Social Order*. Schocken Books, New York.
- Darendorf, R. 1965. *Homo Sociologicus*. 15th Edition. Opladen, Kln, Germany.
- Garfinkel, H. 1967. *Studies in Ethnomethodology*. Prentice Hall, New Jersey.
- Giddens, A. 1979. *Central Problems in Social Theory: Action, Structure and Contradiction*. U of C Press, Berkeley, CA.
- Giddens, A. 1990. *The Consequences of Modernity*. Stanford University Press, Stanford, CA.
- Goffman, E. 1963. *Stigma: Notes on the Management of Spoiled Identity*. Simon and Schuster, New York.
- Goffman, E. 1959. *The Presentation of Self in Everyday Life*. Doubleday, New York.
- Goffman, E. 1986. *Frame Analysis*. Northeastern University Press, Boston, Mass.
- Heise, D. R. 1987. Affect Control Theory: Concepts and Model. *Journal of Mathematical Sociology* 13:1-33.
- Heise, D. R. 2007. *Expressive Order: Confirming Sentiments in Social Actions*. Springer, NY.
- Heise, D.R. and MacKinnon, N. 2010. *Self, Identity, and Social Institutions*. Palgrave MacMillan, NY.
- Homans, G. 1961. *Social Behavior: Its Elementary Forms*. Harcourt Brace Jovanich, New York.
- House, J.S. 1977. The Three Faces of Social Psychology. *Sociometry* 40(2): 161-177.
- Hutton, W. and Giddens, A. (Eds.) 2012. *On the Edge: Living with Global Capitalism*. Vintage Digital, London, United Kingdom.
- Linton, R. 1936. *The Study of Man: An Introduction*. Prentice Hall, NJ.
- Marx, K. and Engels, F. 1848. *The Communist Manifesto*. Signet Classics; Signet Classic edition (1998). New York, NY, USA.
- Mead, G. H. 1922. A Behavioristic Account of the Significant Symbol. *Journal of Philosophy* 19: 157-163.
- Mead, G. H. 1927. The Objective Reality of Perspectives. In: E. S. Brightman (Ed.), *Proceedings of the Sixth International Congress of Philosophy* (pp. 75-85). New York, NY, USA.
- Merton, R. 1949. *Social Theory and Social Structure*. Free Press, Glencoe, Illinois.
- Parsons, T. R. 1951. *The Social System*. Free Press, Glencoe, Illinois.
- Schneider, A. 2011. "Symbolic Interactionism: From Gestalt to Cybernetics," Chapter 11 In: *Theories in Social Psychology* (250-279) D. Chadee. (Ed.) Wiley-Blackwell, Oxford, United Kingdom.
- Schneider, A., and Heise, D. R. 1995. Simulating Symbolic Interaction. *Journal of Mathematical Sociology* 20: 271-287.
- Stryker, S. 1977. Developments in the Two Social Psychologies. *Sociometry* 2:145-160.
- Stryker, S. 1987. Self and Identity: Psychological Perspectives. In Yardley, K. and Honess, T. *Identity Theory: Developments and Extensions* (pp. 89-103). Routledge and Kegan Paul, London, United Kingdom.

- Stryker, S., Owens, T. J., and White, W. R. 2000. *Self, Identity and Social Movements*. University of Minnesota Press, Minneapolis.
- Weber, M. 1922. *Wirtschaft und Gesellschaft*. Johannes Winkelmann (ed.). J.C.B. Mohr 1972. Tbingen, Germany.

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Burapha University