

EXPLORING SWEDISH LOCAL PLANNING AUTHORITIES' PERCEPTIONS OF STANDARDIZED HOUSING CONSTRUCTION

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We explore how Swedish Local Planning Authorities perceive standardized housing construction and attempt to use an ideal type typology of institutional logics to describe how Local Planning Authorities make use of the multiple institutional logics available to them. Increased standardization in Swedish housing construction has been suggested as a means to meet the growing need for housing with reasonable rent levels. However, housing contractors that use standardization and repetition of processes and components claim that the variation of requirements set by Local Planning Authorities prevents them from taking full advantage of their standardization. A recent empirical study of standardized housing contractors' perceptions suggests that Local Requirement Setting, the requirement setting practices of Local Planning Authorities, are interpretational responses to a lack of familiarity with standardized housing construction. Yet, Local Planning Authorities' perceptions of standardized housing construction have never previously been explored. Empirical material for this on-going study was collected through in-depth exploratory interviews with local planning officers from three municipalities situated in Swedish population growth regions. Findings suggest that Local Planning Authorities perceive potential benefits with standardization, but ultimately expect standardized housing concepts to adapt to local standards for processes and products. In projects with high ambitions for architectural quality standardized housing concepts need to be highly flexible. Conversely, highly standardized housing concepts benefit from project ambitions that favour reasonable rent levels. Therefore, Local Requirement Setting is indicative of a mismatch between the Local Planning Authority's project ambitions and the standardized housing contractor's degree of product standardization.

Keywords: ideal type, institutional logics, local planning, local requirement setting, standardization.

INTRODUCTION

The Swedish government and construction sector agree that increased standardization of housing construction is necessary in order to meet demands for lower production costs, shorter time frames and higher production quality (SOU 2012:86, Statskontoret 2009). Standardization is frequently highlighted as a potential remedy the growing Swedish housing shortage, particularly to the shortage of housing with reasonable rent levels; by reasonable we mean a level of rent that an average Swedish household can afford. Gibb and Isack (2001) define standardization as:

'Standardization is the extensive use of processes or procedures, products or components, in which there is regularity, repetition and a record of successful practice

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[...] Suppliers produce standard items or customised items with standard components through standard procedures [...] Process standardization may vary from absolutely standard documentation and procedures at the detailed level, to a more strategic approach of a standard framework or approach.'

In literature standardization is frequently connected to a discussion in terms of pre-fabricated construction, offsite production or construction, and industrialised building systems as a means to move some of the effort that goes into the construction process, into a controlled environment (Goulding *et al.* 2015). This discussion takes its standpoint from how to control the means of production. However, as early as 2001 Gibb and Isack (2001) pointed out that standardization has changed over the years with efforts now being made to meet clients' needs and produce customised individual buildings, yet still using standard components and employing standard processes to ensure success. An increased level of standardization must be weighed against the reduced variety for the customer. Using definitions from production-systems and resource based perspectives Jansson *et al.* (2014) view standardization as the strategic idea of housing contractors to control and create a predictable and stable supply chain through the notion of platforms. In their platform definition of standardization Jansson *et al.* (2014) include a variety (continuum) in the component platform between certain levels of standardization for housing contractors utilizing the off-site production technologies volumetric preassembly and/or modular building categorized by Gibb and Isack (2003). For the scope of this paper it is interesting to recognize that there are primarily two types of standardization a client meets: process or product standardization and that both types offered by a standardized housing contractor may be designed (as a company strategic choice on how to control the means of production) in ranging levels.

According to the Swedish Planning and Building Act (PBA) it is mandated to the local authority to plan the use of Swedish land and water to ensure the quality of the built environment. The concept of 'quality' in architecture and urban design is theoretically complex and subject to a wide range of interpretations (Rönn 2010). However, among practitioners the term 'architectural quality' is commonly associated with building proportions, façade materials and the design of particular features such as the ground floor, roofs and eaves and 'urban design quality' is more closely associated with city block structures, street spaces and the specifics of the site surroundings such as noise pollution. The two terms do somewhat overlap, but generally speaking urban design quality deal with the proposed building in relation to its surroundings whereas architectural quality deal with the proposed building in relation to its end users.

To fulfil this mandate local planning authorities (LPAs) are allowed to set requirements for local construction projects, either through regulations in detailed development plans (DDPs) or in development agreements. DDPs can be either flexible or project-specific (Kalbro *et al.* 2012). The PBA is based on the assumption that all DDPs are flexible, i.e. are developed without a specific project in mind, and as such contain only the bare minimum of regulations that is necessary in order to ensure the purpose of the plan. However, developers that initiate DDPs want to be involved during the planning process in order to optimise the DDPs for specific projects (Kalbro *et al.* 2013).

Local requirement setting, the municipal practice of setting requirements that vary greatly in extent and scope between one LPA and the next, has been questioned on the basis that the large variance is detrimental to housing construction in general (SOU

2012:86) and to standardized approaches in particular (Stehn *et al.* 2013). The conclusions made by SOU 2012:86 that the intentional setting of local requirements disregards standardized housing contractors' needs for transparency and predictability has led to the implementation of legislative changes that forbid LPAs from formulating intentional local requirements. In the wake of these changes some LPAs are now struggling to find new ways of ensuring the quality of the built environment.

Although the relation between standardized housing contractors and external project conditions stemming from client decisions have been previously explored in the construction management literature, i.e. as client barriers to adopting technical innovations (Hedgren and Stehn 2014), requirements originating from local authorities remains an under-developed research topic. Viking and Lidelöw (2015) identified that in addition to intentional local requirement setting there is also interpretive local requirement setting which results from a lack of familiarity with standardized housing construction, yet there are no studies that address how standardization is perceived by LPAs.

Viking and Lidelöw (2015), using Thornton *et al.*'s (2012) institutional logics perspective, suggested that when confronted with standardized housing construction planning officers respond by making use of a number of different institutional logics. By exploring LPA's perceptions of standardized housing construction we aim to use a model of Friedland and Alford's (1991) inter-institutional system constructed from a typology of ideal types (Weber [1922] 1978) to describe how LPAs make use of the multiple institutional logics available to them.

Empirical material for this on-going study was collected through exploratory interviews with respondent from the LPA of three Swedish municipalities situated in regions of population growth. Our analysis reveals that we are at present not able to use institutional logics to conclusively describe the actions of LPAs in relation to standardized housing construction.

AN IDEAL TYPE TYPOLOGY OF INSTITUTIONAL LOGICS

Institutional theory advocates non-rational, cultural socially constructed explanations of societal order and change. Friedland and Alford (1991:243) define institutions as:

'Institutions are supraorganizational patterns of activity by which individuals and organizations produce, and reproduce their material substance and organize time and space. They are also symbolic systems, ways of ordering reality, thereby rendering experience of time and space meaningful.'

Friedland and Alford (1991) conceptualised the world as an inter-institutional system comprised of the major institutional orders in society, each associated with its own central institutional logic. They argued that individuals, organizations and society constitute three nested levels, specifying progressively higher levels of opportunities and constraint for action. Thornton (2004) following Doty and Glick (1994) argues that Friedland and Alford's (1991) inter-institutional system can be viewed as a typology of ideal types (Weber [1904] 1949).

An ideal type is a pure analytical model of the typical features of a phenomenon that have been abstracted from the empirical reality. The ideal type never seek to claim its validity in terms of reproduction or correspondence with reality, but through terms of adequacy (Weber [1904] 1949). As such the ideal type is a tool for interpreting cultural meanings into their logically pure components and understanding the meaning that actors invest their actions with (Swedberg 2005).

In its most recent update (Thornton *et al.* 2012:73) the ideal type typology of the inter-institutional system consists of seven institutional orders: family, state, market, profession, corporation (Friedland and Alford 1991), religion (Thornton 2004) and community (Greenwood *et al.* 2010), each constructed by a set of nine categorical ideal types: root metaphor, sources of legitimacy, sources of authority, sources of identity, basis of norms, basis of strategy, informal control mechanism and economic system. Friedland and Alford (1991:250) note that institutional logics are 'mutually interdependent and yet contradictory'. During later years the study of institutional complexity, how individuals and organizations respond to encounters with incompatible prescriptions from multiple institutional logics (Greenwood *et al.* 2011), have become a rapidly growing stream within institutional logics research. The literature on institutional complexity details a number of strategies that individuals and organizations may use to respond to interdependencies and contradictions between different institutional logics (Pache and Santos 2010, Kraatz and Block 2008).

RESEARCH DESIGN AND METHODS

Empirical material for this on-going work was collected during December 2014 – April 2015. The material was collected through the use of explorative interviews with respondents from the LPAs of three Swedish municipalities. Municipalities A, B and C are situated in Swedish population growth regions and as such housing construction volumes in all three municipalities are high compared to the national average.

Municipality A was chosen because of its extreme need for housing with reasonable rent levels coupled with very high ambitions for architectural quality. Municipality B distinguished itself by a large number of completed standardized housing construction projects. Municipality C were very strongly opposed to the legislative changes to forbid intentional local requirement setting, but still carries an interest for standardization due to a perceived potential for environmental improvements. From each municipality interviews were conducted with two respondents, one detailed development planner (A1, B1 and C1) and one respondent who works with development agreements (A2, B2 and C2).

Due to the exploratory nature of the study the interview questions were revised with each new interview, and as such none of the respondents were asked an identical set of questions. However, the following question areas were recurrent throughout all of the interviews: (1) what were the LPA's requirement setting prior to the legislative changes and how have they changed since their implementation, (2) what did the respondents think standardized housing construction is and what associations they made upon hearing the term, (3) what were the respondents previous experiences with standardized housing construction, and (4) what did the respondents think should be standardized, to what degree, and by who so as not to conflict with their local standards for products and processes.

All interviews were made in situ, so as not to deprive the researcher of informal, nonverbal communication. The interviews lasted 45-90 minutes each and were all recorded and subsequently transcribed. The empirical material was analysed using thematic coding (Miles and Huberman 1994) in which thematic codes from a predefined list were applied to transcribed sections of text. Superfluous codes were removed and overly represented codes were subdivided, redefined and reapplied in an iterative manner until the researcher determined that the remaining themes corresponded well to the empirical material at large. The remaining themes were then

abstracted into the terms of the ideal type typology of the inter-institutional system. Only 9 out of the 63 ideal types were found useful to make these abstractions so due to space limitations only those 9 ideal types are depicted in the analytical model (Table 1) below. This also approach allowed us to identify empirical material where ideal types from multiple institutional logics were used simultaneously.

Table 1: Analytical model adapted from Thornton et al. (2012:73)

	State logic	Market logic	Profession logic
Source of legitimacy	Democratic participation	Share price	Personal expertise
Source(s) of identity	Social and economic class	Faceless	Association with quality of craft Personal reputation
Basis for strategy	Increase community good	Increase efficiency profit	Increase personal reputation

THE MUNICIPAL PERSPECTIVE ON STANDARDIZATION

All the respondents agreed that the term 'standardized construction' transmits many negative associations. Most of them immediately thought about failed business ventures involving standardized housing construction or of projects from the Swedish Million Homes Programme during the 1960s and 70s, infamous for its overly rational approach that resulted in extremely monotone environments. However, many of the respondents were also adamant that standardized construction has come a long way since then and they believed that the approach carries with it lots of benefits over traditional approaches construction. In fact, most were convinced that standardization is an important, perhaps even necessary, factor for tackling the current Swedish housing shortage.

Municipality A

Municipality A is among the biggest municipalities in Sweden, both in terms of population growth and in housing construction. Even so the housing deficit is massive and coupled with extremely high construction costs, the shortage of small lease-hold apartments, is a particularly growing concern; so great that the LPA has is instructed to pay particular attention to the ability to produce housing with reasonable rent levels when considering housing developers for development agreements for construction on municipal land. The LPA stressed that rent level is a much more important variable than construction cost, because if the housing is sold or leased at market value the earnings from low construction costs will not benefit the end-users at all. The LPA employs project-specific DDPs, as the PBA directs them to carefully describe the consequences of plans to the public; conducting public consultations for one building yet granting building permit for another would be to trick the public.

Urban planning is an issue of great importance to the local politicians and, despite a frequently shifting political majority, there is a broad political consensus in this particular area. Municipality A feels that it can afford to have extremely high ambitions for architectural quality as the central location assures that there will never be a shortage of willing housing developers regardless. One planning officer elaborated that while architectural quality may seem subjective to the untrained in actuality it is not:

“Architectural quality is like musical quality. Regardless of whether you like it or not, if you are well versed, you can determine what is good quality and what is not.” - A1

With regards to standardization, the planning officers felt that they have never been opposed to it; that while reasonable rent levels is secondary to high architectural quality, the interests are not by nature antagonistic. On the contrary, they found the prospect of standardized leasehold apartments with reasonable rent levels and high architectural quality to be a very attractive proposition. However, they felt that standardized housing concepts need to be quite flexible in order to be applicable, because in highly urbanised areas adaption to the surroundings is an important factor that will exclude the usage of housing concepts with too high degrees of product standardization. They also felt that in order to avoid many complications it would be beneficial to standardized housing contractors to consider architectural quality to a greater extent in their product standardization, perhaps by incorporating a flexible interface for the façade to an otherwise standardized product.

Municipality B

Municipality B is among the ten largest Swedish municipalities in terms of population and also boasts a very large number of standardized housing construction projects relative to their size as well as a wide range of different standardized housing contractors. The LPA employs flexible DDPs with few requirements and local design programmes that describe desired qualities rather than prescribe detailed solutions. One planning officer explained that their approach focuses more on urban design quality than architectural quality:

‘We often focus on the logic of the space: how will people act around it, how will they use the proposed building. That is more important than whether the facade is red or black or what type of roof it has.’ - B2

The flexible approach is motivated not only by the content of the PBA, but also because the practice saves the LPA from having to redo the DDP if the project falls through as would be the case for a more project-specific DDP. The planning officers believed that this in combination with their more collaborative approach to development agreements is the key to enabling standardized construction.

Municipality B did previously use local requirements for energy, as this was mandated by the local politicians, but the planning officers claim that they felt that they lacked the proper legitimacy required to enforce a deviation from the building code and were almost relieved when the legislative changes were implemented that now prevent them from setting such requirements. It seemed, however, that the local politicians were keenly aware that there are conflicting interests related to housing construction. One planning officer elaborated:

“On the one hand they want to quickly enable the construction of housing – affordable housing, but at the other hand they do not want to lower the level of quality ambition either.” - B1

The planning officers said that despite the uncertainty of the local politicians, the long-standing overarching goal is the construction of a sufficient quantity of affordable housing. However, they were still not convinced that standardized housing construction necessarily leads to reasonable rent levels. In particular, they felt that standardized housing concepts with high degrees of product standardization are difficult because they lack the level of flexibility necessary to adapt to most project surroundings, e.g. noise pollution. Instead, they felt that standardized housing

contractors should focus on developing their process standardization or a product standardization that enables more diversity.

Municipality C

Municipality C is smaller than A and B, but with a positive population growth and a sizable housing deficit. The local politicians strive to develop an environmentally friendly profile. In particular, municipality C was among the most vocal in the public debate about local requirement setting, claiming that the national building code was out of sync with time. Municipality C has a strong interest in the forest industry and wood as a construction material. The local public housing developer was recently ordered to drastically increase its production share of timber-frame housing. According to the LPA, setting challenges and forcing actors to think outside the box is the best way to drive a development process forward.

The municipality is eager to try anything that drives the development forwards; they want to experiment, to learn together with other actors, and for this purpose they have designated an area that they stipulate will only be used for pilot projects using timber frames. The LPA felt that learning and developing is a teamwork effort that requires the cooperation of a chain of actors: sawmills to deliver the raw materials, politicians to create the right conditions, planning officers to create the plans and surfaces, architects to deliver ideas and the construction industry to deliver the finished product. This approach has allowed the local public housing developer to work continuously with a number of local contractors that together have been able to drive the production costs down to a level that is among the lowest in the entire country.

Municipality C employ flexible DDPs, as they believe that if there is an opportunity for development advancements, then the DDP should not stand in their way. They were very critical towards LPAs that regulate architectural quality in the DDP, claiming that it should be reserved for regulating the urban design quality. One planning officer elaborated on their view of different municipalities setting different requirements for similar projects:

“It is not reasonable. It is not wrong for municipalities to set requirements, but there has to be rules so that everyone knows what is going on.” – C1

The planning officers of municipality C have had previous exposure to standardized housing construction in the shape of standardized glulam timber frames and prefabricated concrete components, but not with fully modular construction which they admit may be influencing their perspective. In general, they believed that the construction industry is the weakest link in their chain and that anything that could possibly drive the development of the industry forward is a good thing. However, they felt that standardized housing contractors should focus on process standardization and limit their product standardization to the supporting structure, installations and other cost driving components. This standardized core could then be modularised and configured according to the architect’s visions in order to achieve product diversity. One planner explained why it is important that each actor in the chain does their own job and not someone else’s:

“No matter how much we draw we cannot do this without the input from the building industry, but also vice versa. We should not create utopian plans or houses that cannot be implemented, but they should not produce houses that no one wants.” – C1

ANALYTICAL IMPLICATIONS

The analysis of the empirical material reveals that for all three municipalities the main source of legitimacy was 'personal expertise', the main source of identity was 'association with quality of craft' and the main basis of strategy was 'increase of community good'. Given the limited extent of the empirical material it any claim for analytical conclusions would be premature, however there are a number of analytical implications that we can identify from the analysis.

The first implication is that LPAs to an extent do seem to employ strategies to handle interdependent and contradictory logics. For instance the claims of respondents from municipality A that detailed development plans should be project-specific is based on an argument that their source of legitimacy consists of both 'personal expertise' and 'democratic participation', thus combining elements profession logics with elements of state logic.

The second implication is that some of the ideal types, such as 'personal expertise', 'association with quality of craft' and 'increase of community good' are somewhat ambiguous. Respondents from municipality A considered the primary cause of 'increase of community good' to be high architectural quality, whereas respondents from municipality B considered it to be reasonable rent levels and respondents from municipality C considered it to be a combination of reasonable rent levels and urban design qualities. These different considerations result in the three municipalities having different ways of relating 'increase of community good'(state logic) to 'increase of efficiency profit' (market logic). As respondents from municipality A consider architectural quality potentially contradictory to standardized housing construction state logics is also considered contradictory to and given primacy over market logic. For respondents from municipality B the two logics are instead complementary and for respondents from municipality C they are simultaneously both complementary and contradictory. Although we acknowledge that these differences may be caused by the combinations of multiple institutional logics, which may be possible to study by using institutional complexity, we have at present not been able to identify which these combinations may be.

A third implication is that by using the analytical model we were not able to fully describe all aspects of the empirical material; some unexplained themes remained. One such theme was the insistence of some LPA on furthering their own politically motivated local standards for housing construction. Municipality A would be willing to accept standardized housing construction only on the condition that it adapts to the local standards for architectural quality and municipality C only accepts standardized housing contractors on the condition that they are willing to engage in collaborative experimentation. Another related theme was the tendency of these LPAs to insist that adaptation is strictly voluntary for standardized housing contractors; that if they are not interested they can always go somewhere else. This insistence is based on the assumption that other municipalities do not have local standards of their own. These two themes in particular were difficult to describe using the ideal type typology analytical model.

In summary, implication one is encouraging; it seems possible to some extent to explain LPA's perceptions of standardized housing construction using an ideal type typology of institutional logics. Implications two and three are less encouraging; there are themes that are not properly described and the elements of the analytical model may result in different interpretations from one respondent to the next. However, let

us stress again the exploratory and early character of our research, which is based on a very small amount of empirical material. While at present it is implied that some of the ideal types are ambiguous, it may be because the limited extent of empirical material prevented the discovery of abstractions to other combinations of ideal types that would better describe the observed empirical differences. A similar case can be made for the non-described themes, that more empirical material may enable discoveries and abstractions that at present are impossible to make.

The answer to the question whether or not LPAs' perceptions of standardized housing construction can be described using an ideal type typology of institutional logics remains unanswered. We see three possible avenues for advancement. The first would be to go out and collect more empirical material and thereby being able to draw more precise conclusions. The second avenue would be to redo the analysis, focusing more intently on the institutional complexity in the hopes that this would bring about new realisation and insights. A third possibility is to accept that the ideal type typology approach can only hope to be successful to a certain degree and that in order to provide a more complete description of the empirical material the current theoretical perspective may need to be complemented by an additional theoretical perspective.

CONCLUSIONS

This paper contributes empirically by identifying that the degree of product standardization that is possible to use depends on the Local Planning Authority's project ambitions. In projects where ambitions for architectural quality are high standardized housing concepts need to be more flexible. Highly standardized housing concepts instead benefit from project ambitions that favour reasonable rent levels. Therefore, the presence of Local Requirement Setting is indicative of a mismatch between the Local Planning Authority's project ambitions and the standardized housing contractor's degree of product standardization.

We also identify that although Swedish local planning authorities see potential benefits in using standardized housing construction, they ultimately expect standardized housing concepts to adapt to the local standards for processes and products that each Local Planning Authorities itself champions. Although local requirements can no longer be set through formal directives municipalities seem to be finding new, less formal ways, to regulate the built environment.

Finally, we contribute to the small body construction management papers based on institutional theories by attempting to describe our empirical material using an ideal type typology of institutional logics, thereby making three analytical implications.

REFERENCES

- Doty, D H and Glick, W H (1994) Typologies as a unique form of theory building: Toward improving understanding and modeling. *Academy of Management Review*, **19**(2), 230-51.
- Friedland, R and Alford, R (1991) Bringing society back in: Symbols, practices and institutional contradictions. In: W W Powell and P J DiMaggio (Eds.) *The new institutionalism in organizational analysis*. Chicago: University of Chicago Press.
- Gibb, A G F and Isack, F (2003) Re-engineering through pre-assembly. Client expectations and drivers. *Building Research and Information*, **31**(2), 146-60.
- Gibb, A G F and Isack, F (2001) Client drivers for construction projects: Implications for standardization. *Engineering, Construction and Architectural Management*, **8**(1), 46-58.

- Goulding, J S, Pour Rahimian, F, Arif, M and Sharp, M D (2015) New offsite production and business models in construction: Properties for the future research agenda. *“Architectural Engineering and Design Management”*, **11**(3), 163-84.
- Greenwood, R, Raynard, M, Kodeih, F, Micelotta, E R and Lounsbury, M (2011) Institutional complexity and organizational responses. *“The Academy of Management Annals”*, **5**(1), 317-71.
- Greenwood, R, Diaz, A M, Li, S X and Lorente, J C (2010) The multiplicity of institutional logics and the heterogeneity of organizational responses. *“Organization Science”*, **21**(1), 521-39.
- Hedgren, E and Stehn, L (2014) The impact of clients' decision-making on their adoption of industrialized building. *“Construction Management and Economics”*, **32**(1-2), 126-145.
- Jansson, G, Johnsson, H and Engström, D (2014) Platform use in systems building. *“Construction Management and Economics”*, **32**(1-2), 70-82.
- Kalbro, T, Lindgren, E and Paulsson, J (2013) *“Offentlig reglering av byggprojekt - För detaljerat och för tidigt?”* [in Swedish]. Report: TRITA-FOB-Rapport 2013:7. Stockholm: Royal Institute of Technology.
- Kalbro, T, Lindgren, E and Paulsson, J (2012) *“Detaljplaner i praktiken - Är plan- och bygglagen i takt med tiden?”* [In Swedish]. Report: TRITA-FOB-Rapport 2012:1. Stockholm: Royal Institute of Technology.
- Kraatz, M S and Block, E S (2008) Organizational implications of institutional pluralism. In: R Greenwood, C Oliver, K Sahlin and R Suddaby (Eds.) *“The SAGE handbook of organizational institutionalism”*. London: Sage.
- Miles, M B and Huberman, M A (1994) *“Qualitative data analysis: An expanded sourcebook”*. 2ed. Thousand Oaks, CA: Sage.
- Pache, A and Santos, F (2010) When worlds collide: The internal dynamics of organizational responses to conflicting institutional demands. *“Academy of Management Review”*, **35**(3), 455-76.
- Rönn, M (2010) Quality in architecture and urban design. *“Design Research Journal”*, **2**(10), 46-54.
- SOU 2012:86 *“Ökat bostadsbyggande och samordnade miljökrav - genom enhetliga och förutsägbara byggregler”* [In Swedish].
- Statskontoret (2009) *“Sega gubbar”* [In Swedish]. Report 2009:6. Stockholm: Statskontoret.
- Stehn, L, Andersson, R, Engström, D, Johansson, H, Löfsjögård, M and Söderqvist, J (2013) *“Industriella processer för bygg och förvaltning: En forsknings- och innovationsagenda”* [In Swedish]. Available: <http://bit.ly/1optJIA>.
- Swedberg, R (2005) *“The Max Weber dictionary: Key words and central concepts”*. Stanford, CA: Stanford University Press.
- Thornton, P H, Ocasio, W and Lounsbury, M (2012) *“The institutional logics perspective: A new approach to culture, structure and process”*. Oxford: Oxford University Press.
- Thornton, P H (2004) *“Markets from culture: Institutional logics and organizational decisions in higher education publishing”*. Stanford, CA: Stanford University Press.
- Viking, A and Lidelöw, S (2015) Exploring industrialized housebuilders' interpretations of local requirements using institutional logics. *“Construction Management and Economics”*.
- Weber, M ([1904] 1949) Objectivity in social science and social policy. In: E A Shils and H A Finch (Eds./Trans.) *“The methodology of the social sciences”*, New York: Free Press.