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Waluszewski, A., Hakansson, H., & Snehota, I. (2019). The public-private partnership (PPP) disaster of a new hospital – expected political and existing business interaction patterns. *Journal of Business & Industrial Marketing*, *34*(5), 1119–1130. https://doi.org/10.1108/JBIM-12-2018-0377

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# The Public-Private Partnership (PPP) Disaster of a New Hospital - Expected Political and Existing Business Interaction Patterns

#### 1. Introduction

One of the most salient contemporary societal trends is the increasing number of public-private collaborations, including public areas that traditionally have been considered as inappropriate to expose to business involvement and economic exchange (Sandel, 2012; Rider and Waluszewski, 2015). Besides the general complication of relating *civic or public goods* (whose utilisation should reflect *collective interests*) to the *interests of private firms*, there is another important aspect to consider, and which is the main interest of this paper: *The underlying assumptions among policy makers about the world of business*.

The rationale for the political/policy encouraged public-private collaborations, for example in health, infrastructure, higher education and research, is to achieve cost efficiency and innovation (Rider and Waluszewski, 2015; Eklund and Waluszewski, 2015; Mirowski, 2011). This motivation rests on some specific features assumed to characterise private businesses' exchange, and is also behind the emergence of a specific type of collaboration: *public-private partnership*, *PPP*. Although PPP is an umbrella term, the common denominator for these types of contracts is that the private partner takes responsibility for both building and the subsequent operation of an investment, something that is thought to create a strong incentive for the private partner to search for both cost efficiency and quality (Hodge et al., 2007; Skelcher, 2005; Hart 2003).

Over the last decades, an extensive body of research on PPP has emerged. Since public-private partnerships evoke a number of issues, from moral and ideological to managerial, it has also attracted attention from researchers in a wide variety of research disciplines, with political science in the forefront (Skelcher, C., (2005). Research interest has been directed to the content and constitution of PPP, and to the contractual form, and above all, to the risks involved. Furthermore, attention has been directed to how PPP has been utilised in different types of areas such as infrastructure and construction, and in different national, political and policy contexts (Osborne, 2000; Hodge and Greve, 2007). Significant criticism has also been directed to the PPP phenomenon, addressing the need for *evaluation of risk, cost and benefits*. As expressed by Hodge and Greve, 2007:

"PPPs promise much. But careful evaluation, away from the loud noise of cheerleader squads, is now needed to ensure that governments maintain their high standards of policy effectiveness while continuing to harbor the desire to look good to voters and the business sector by building infrastructure." (Hodge and Greve, 2007, p. 558)

However, despite the increasing awareness of the need to scrutinise the promises of PPP, there is an important but seldom asked question: How does the assumed interaction pattern

behind PPI, that is of the private business world, in the PPP literature most often referred to as the 'market', or 'business sector', correspond with the interaction pattern appearing in empirical studies of the content of business exchange? What ingredients in economic exchange between private businesses are, explicitly or implicitly, supposed to function as a guarantee for a PPI to deliver efficiency, quality and renewal, and how do these features present themselves in empirical studies on the content of business exchange? The ambition of this paper is to go beyond the call for better management of PPP, and focus instead on what foundation is assumed to work.

## 1.2 Aim of the paper

The aim of this paper is to shed light on the discrepancy between the expected and the actual pattern of interactions in PPPs. The attention is primarily on the interaction pattern of private business that politicians and policymakers expect to leverage in the PPP, and the interaction pattern pictured in empirical research on business interaction. Hence it is not the PPI process per see, that is how it is planned and managed, that is in focus of this study. Rather it is the political/policy understanding of the business world, efficiency and innovative forces included, and how they are thought to possibly be utilised for public purpose through the PPI – respectively how they appear empirically in the business setting.

The point of departure is IMP's methodological and conceptual approach developed for research in the content of economic exchange (Håkansson and Snehota, 1995; Håkansson et al, 2009, Håkansson and Snehota, eds, 2017). Put briefly, these research findings unveil interaction patterns characterised by utilisation of economic resources whose value are unknowable in any total sense, and by problem-solving interaction across organisational borders, and by interdependencies with previous investments in social and material resources on both sides of the exchange interface (Håkansson et al, 2009).

However, acknowledgement of the interactivity of the business landscape does *not* characterise the general political and policy interpretation of the basic characteristics of private business exchange. Instead, it is strongly influenced by conventional market thinking, portraying business exchange as a matter of mechanistic reactions (Eklund and Waluszewski, 2015; Rider and Waluszewski, 2015; Mirowski, 2011). Thus, OECD, as well as EU policy in general, are based on the assumption that the price mechanism, if it is not hindered, is a guarantee for efficiency and renewal. Through a number of market-model inspired arrangements, this mechanism is thought to be usable in the public setting to increase efficiency and innovation (Eklund and Waluszewski, 2015; Rider and Waluszewski, 2015; Mirowski, 2011). The trust in PPP, expressed by political scientists, politicians and policy, rests on similar suppositions: it is grounded in microeconomic contract theory, acknowledging asymmetric information but assuming that it is possible to overcome through managerial arrangements (Hart, 2003; Hodge et al., 2007).

A specific PPP is investigated in terms of the assumed respectively empirically outlined interaction pattern of the private businesses and concerns a new Swedish hospital building. The political ambition with the PPP was to build a 'world-class-hospital' in terms of cost efficiency, quality and cost control. Eventually, the hospital construction project also was

placed 'on the world map' – but for reasons completely other than expected – as the world's most expensive hospital building *and* a functional disaster.

The paper is designed as follows: In the next section we introduce the empirical case of the focal public-private partnership (PPP). Thereafter, we present the research design – the theoretical and methodological point of departure. Then follows a discussion of what interaction pattern the politicians behind the PPP aimed to utilise, respectively of the pattern outlined in empirical research on the content and consequences of economic exchange. In the concluding discussion, we argue that the studied PPP disaster is not an odd case, caused by mismanagement, but rather a natural consequence of expecting one type of interaction pattern and in reality being faced with a very different one.

## 2. Expecting a PPP success and facing a disaster – the New Karolinska Hospital project

In 2008 Stockholm County decided to invest in a totally new hospital, 'New Karolinska Solna', NKS, which, besides providing advanced health care, should put the region's academic research and life science industry on 'top-of-the-top' nationally and internationally. In 2010 the county decided to utilise Public-Private Partnership (PPP) for the procurement of the new hospital. Based on advice from a number of private consultancy firms, with Öhrlings PricewaterhouseCoopers (ÖPwC) in the foreground, the county's politicians saw the public-private partnership as a means to reach a cost efficient and innovative hospital building. As expressed in the procurement decision, the political ambition was to utilise "the private sectors' competitive situation to drive innovation and design forward", and furthermore, to "minimise time offsets and cost increases to the performers of the project, that is the PPP company".

In contrast to the traditional way of carrying out public procurement, where a public actor is the direct counterpart to the private bid winner, the role of governing the sub-procurement process is different in the PPI process. The procurement from sub-suppliers is taken over by the PPP company, which, besides having responsibility for building and financing, is also responsible for maintenance for decades to come – something that is thought to create a strong incentive for the bid winner to deliver cost control and quality. In the NKS case, the PPI solution implied that Stockholm County's own construction and facility management company, Locum, with extensive experience in construction planning in interaction with suppliers and user professionals, to a large extent was bypassed in the PPI process (Sundström et al., 2016; Öhrming, 2015).

Stockholm County accepted a bid of Euro 1.3 billion<sup>3</sup>, presented by Swedish Hospital Partners AB (SHP), a Swedish-British consortium designed specifically for this PPI. Two large companies were behind the consortium: Skanska, one of the largest Swedish construction companies, and Innisfree, a leading infrastructure investment group in the UK, specialised in long term investments in public-private infrastructure projects. The accepted

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<sup>&</sup>lt;sup>1</sup> <u>http://www.nyakarolinskasolna.se/globalassets/nks-rapport-1---beskrivning-av-ops-upphandling.pdf</u>, p. 49. Author's translation.

 $<sup>^2 \ \</sup>underline{\text{http://www.nyakarolinskasolna.se/sv/Bakgrund/OPS-upphandlingen/}}. \ Author's \ translation$ 

<sup>&</sup>lt;sup>3</sup> SEK 14.5 billion

bid was assumed to fulfil the demands on innovation, quality and cost control, despite the fact that the politicians were informed about the significantly higher costs for loans this solution would imply. The decision was taken in the wake of the 2007 financial crisis. This was in an era when the awareness of the security difference between private and public loan takers was very high. Hence, a loan taken by Swedish Hospital Partners (SHP) would face a significantly higher cost as compared to a loan taken by Stockholm County. Swedish counties and communities are also legally allowed to, and had a long history of, taking loans from private financial institutions (Ennart and Mellgren, 2015).

Compared to a traditional construction procurement financed by a loan taken by Stockholm County, the PPP solution, including private financing, implied added loan costs of about Euro 30 million per year; that is Euro 300 million per decade (Ennart and Mellgren, 2015, p. 37). The fact that this higher cost was accepted rested on the belief, as expressed in the political decision, that the PPP company should "be constantly searching for and delivering innovation, quality and cost control," leading to benefits assumed to overtrump the higher loan costs.<sup>4</sup>

In hindsight, with all facts at hand, the NKS PPP project proved to fail in all of these aspects. NKS also turned out as one of the world's most expensive hospital construction projects ever. In 2015, the building cost was estimated to Euro 1.62 billion. <sup>5</sup> With costs for med tech equipment, the total hospital cost was estimated to be Euro 2.25 billion. <sup>6</sup> Furthermore, when the hospital gradually was put into use, starting in late 2016 to be concluded in 2018, it became seriously criticised and condemned by the profession. A common denominator in the criticism was that the NKS was constructed as a standard building, badly adapted to the specific needs of health care activities. This, in turn, caused a need for numerous of reconstructions and adaptations when taking the hospital on line. Some of these problems, reported in early 2018 by the profession through the Swedish Medical Association<sup>7</sup>, included: IT breakdowns, seriously threatening patient security; operating theatres not adapted for operations; the risk of medicines being destroyed due medicine rooms being too warm; lingering odours after patient examinations as it was impossible to ventilate rooms since windows could not be opened; medical students could not take part in patient examinations

<sup>&</sup>lt;sup>4</sup> http://www.nyakarolinskasolna.se/sv/Bakgrund/OPS-upphandlingen/. Author's translation

<sup>&</sup>lt;sup>5</sup> SEK 18 billion (Ennart and Mellgren <a href="https://www.svd.se/nya-karolinska-tio-miljarder-kronor-dyrare-att-bygga/om/nya-karolinska">https://www.svd.se/nya-karolinska-tio-miljarder-kronor-dyrare-att-bygga/om/nya-karolinska</a>).

<sup>&</sup>lt;sup>6</sup> SEK 25 billion (Ennart and Mellgren <a href="https://www.svd.se/nya-karolinska-tio-miljarder-kronor-dyrare-att-bygga/om/nya-karolinska">https://www.svd.se/nya-karolinska-tio-miljarder-kronor-dyrare-att-bygga/om/nya-karolinska</a>).

<sup>&</sup>lt;sup>7</sup> Dagens Nyheter, https://www.dn.se/sthlm/lakare-larmar-allvarliga-brister-pa-nya-karolinska/

and studies as the exam rooms were too small; physicians had to carry administrative material in back packs due to lack of space for administrative tasks; and patient privacy was threatened due to lack of secure meeting rooms.

Along with the negative consequences for the patients and the professionals, the mismatch between the hospital building and the health care activities taking place in it, produced a constant need for unplanned re-construction, resulting in some hundred additional orders and running costs. Although this paper is concerned with the building of the new hospital, it can be added that the image of the NKS project was further harmed in 2018, when it became evident that further problems were caused by the introduction of an untried health care model, delivered by Boston Consulting Groups (BCG). The model, based on the assumption of homogeneous patient groups, was introduced despite severe criticism from the professionals, and, furthermore, was suspected to be the result of an incorrect procurement process (Meiling, 2018).

In early spring 2018, Sweden's finance minister called for a governmental investigation of the NKS project, due to massive operational problems and massive cost overruns:

"The government has taken part of reports concerning incongruities with extensive consequences for economy, patient security and work conditions at NKS." 8

## 2.1 Research questions

The politicians actually did succeed with putting NKS on 'the world map' – but rather as a scandal than a 'top-of-the-top' hospital where the PPP delivered cost control, quality and innovation. But what was behind the disaster? As we discuss below, previous research has drawn attention to the lack of influence of the professionals on the construction process; including the handing over of responsibility for the construction process to the PPP company (Öhrming, 2016; Sundström et al., 2018). But was the disaster caused solely by a badly managed project? Or are there other, more fundamental reasons behind the private business sector's inability to realise the political expectations?

The departure of this study is research on interactivity of the business world (Håkansson and Snehota, eds, 1995; Håkansson et al., 2009; Waluszewski et al., 2017), which points at the following hypothesis concerning the NKS disaster: *The political/policy expectations on the interaction pattern of the business landscape does not correspond to the interaction pattern that actually exists*. Although this issue is relevant for all types of public ambitions to utilise the private sector – based on the same assumption about the interaction pattern of the latter – the paper is concentrated on one specific area: infrastructure/construction projects.

The research questions we are pursuing are:

<sup>&</sup>lt;sup>8</sup> http://www.regeringen.se/pressmeddelanden/2018/02/statlig-granskning-med-anledning-av-fallet-nya-karolinska-solna/

- 1. What interaction pattern, explicitly or implicitly, does the political expectation rely on?
- 2. How does the assumed interaction pattern appear in relation to the real interaction pattern, as outlined in empirical research on the content and consequences of business exchange in general, and on the construction industry in particular?

As underlined above, although the clash between public and private interests is evident in the NKS case, the ambition of this paper is *not* to scrutinise the whole and complex NKS genesis and how it was managed. *Rather, we limit our attention to one particular aspect: the political/policy expected respectively the empirically outlined interaction pattern of the private side of the exchange interface.* 

## 2. Research design

The political trust in the promises of a 'competitive private setting' as a mechanism breeding both innovation and efficiency leading to the NKS PPP solution is nothing unique, but as mentioned in the introduction, one of the most salient contemporary societal trends (Sandel, 2012; Rider and Waluszewski, 2015. Consciously or not, it is based on neoliberal economic thinking; assuming that the market is the most efficient information processor and allocator of homogeneous resources to independent actors (Marglin 2008; Mirowski, 2011). In this section we take a closer look at the basic assumptions of the public respectively the private economic landscape, as outlined in neoliberal economic thinking, respectively on empirical experiences, recognising that economic interaction has a content, and is interdependent with social and material 'investments in place' (Utterback and Abernathy, 1975; Håkansson et al. 2009).

## 2.1 Theoretical point of departure

There is a challenging difference in how 'investments in place' (Utterback and Abernathy, 1975; Håkansson et al., 2009) are thought to affect the public or the private economic landscape in approaches assuming that exchange is a content-free mechanism respectively those that recognise and empirically investigate the content of economic exchange.

In neoliberal economic thinking, the general interaction pattern on the private side is assumed to be steered by a simple mechanism – price competition – which is the source of efficiency and renewal. This, in turn, implies that private actors are considered as autonomous and not bound by any investments in place, and the resources exchanged are knowable in a total sense. Hence, context dependency caused by investments in place is approached as non-existing on the private side. *If* context dependencies appear, it is an odd deviation, a sign that market forces have been hindered. Any dependency on investments in place is considered negative, giving rise to inertia and inefficiency (Snehota, 1989; Lawson, 2005; Marglin, 2009).

A variety of heterodox scholars acknowledging social interaction (for an overview see e.g. Lawson, 2005), as well as research on interactivity and interdependency in the business landscape (see e.g. Håkansson et al., 2009; Håkansson and Snehota, 2017) outline rather

different basic characteristics of the private business landscape, as compared to the model of a frictionless market. Based on the latter research experiences, this paper is based on the notion that exchange has content: that the resources exchanged are heterogeneous and their value is created in interaction (Snehota, 1990; Håkansson and Waluszewski, 2002). Furthermore, that the interaction pattern created by economic exchange over time is characterised by establishment of resource ties, activity links and actor bonds (see e.g. Håkansson and Snehota, 1995).

One of the most salient *empirical findings* made in this research stream is that economic exchange between economic actors, *private-private as well as private-public*, has a *content*. The content affects the interaction pattern on both sides of the exchange interface (whether or not the involved parties are private or public); the resources, the activities and the actors directly and indirectly involved. Over time, an interaction pattern emerges characterised by interdependencies, stretching across organisational and legal borders. The private, as well as the public sphere, have made substantial investments in related social and material resources that are steered in relation to different economic interests, public respectively private (Håkansson et al., 2009; Håkansson and Waluszewski, 2013; Håkansson and Snehota, 2017).

This implies that any public-private collaboration, where the public side explicitly or implicitly assumes that it will be able to utilise the 'private sector's competitive situation' to drive efficiency and innovation without taking notice of the actors' investments in place and how they are interrelated, risks severe side effects. Just as private-private collaborations can be beneficial for both sides of the exchange interfaces, so can public-private collaborations (Wagrell and Baraldi, 2019; Håkansson and Waluszewski, 2013). However, the latter requires firstly an awareness of what types of social and material resources, directly or indirectly related to the exchange, the public respectively the private side of the interface will become part of. Secondly, it requires an awareness of whether such interfaces are possible to build, given the public and private actors' different interests. Both sides of the exchange interface, whether public or private, have to be aware of that they will be affected by the direction of historic and contemporary interaction patterns and relationships, and recognise hindrances as well as opportunities to take advantage of them.

## 2.2 Methodology

With an interactive focus as a guide (Håkansson et al., 2009; Waluszewski, Håkansson and Snehota, 2017), we investigate a) the interaction pattern of the business landscape *expected* by policy/politicians in the NKS construction case, and b) how the assumed interaction pattern appears in relation to the interaction pattern of the business landscape *outlined in empirical studies* of exchange in the business landscape in general and of the construction setting in particular. The discussion of the characteristics of the business landscape outlined in empirical studies based on research findings is summarised by Håkansson et al., (2009) and in Waluszewski, Håkansson and Snehota, (2017). The specific experience of the interactive aspects of the business landscape related to the construction industry is based on research findings summarised in Eccles, 1981; Dubois and Gadde, (2002); Holmen et al., (2005);

Harty, (2008); Bengtsson and Håkansson, (2008); Håkansson and Ingemansson, (2013) and Bygballe et al., (2015).

The investigation of the political expectations behind the NKS PPP case rests on two types of data. The following original reports expressing the political view of the interaction pattern of the private were utilised:

- 1) Stockholm County's SLL's description of the PPP procurement, presented in NKS-report 1, May 2010, Description of the OPS-procurement.
- 2) Stockholm County's motivation of the PPP decision, presented in the 2007 report Evaluation of alternative solutions for financing and maintenance of New Karolinska Hospital.
- 3) Öhrlings PricewaterhouseCooper's (PwC) Supplement to the same report; *Evaluation of alternative solutions for financing and maintenance of New Karolinska Hospital*,
- 4) Ernst & Young's FINAL REPORT. Evaluation of PPP as investment and financing form for NKS, presented 2008.

Furthermore, we also utilised four published studies focusing on different aspects of the NKS process – which all discuss the political view of the private business setting:

- a) The journalist study 'Sjukt hus' (Sick house) by Mellgren and Ennart (2015).
- b) The organizational theorist study '*Allt görs liksom baklänges*' (Everything is done backwards), by Öhrming (2016).
- c) The political scientist study 'Framtidens universitetssjukhus: Beslut om Nya Karolinska Solna' (The Futures University Hospital: Decisions concerning New Karolinska Solna), by Sundström et al. (2018).
- d) The market theory study '*Nya Karolinska Ett pilotprojekt för marknadsstyrd vård?*' (New Karolinska A pilot project for market-drive health care?) by Meijling (2018).

## 3. Public-private collaborations and partnerships – what did the politicians expect?

How come that a project aimed to put the New Karolinska Hospital, NKS, on the world map, a few years later was referred to as a disaster, or as summarised in one of the largest Swedish newspapers: "New Karolinska became a scandal instead of a show room". Although the empirical studies of the NKS case presented above focus on different aspects of the project,

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<sup>&</sup>lt;sup>9</sup> Peter Wolodarski, *Dagens Nyheter* 2018-02-12 'Nya Karolinska blev en skandal i stället för ett skyltfönster' (New Karolinska became a scandal instead of a show room'.) <a href="https://www.dn.se/ledare/kolumner/peter-wolodarski-nya-karolinska-blev-en-skandal-i-stallet-for-ett-skyltfonster/">https://www.dn.se/ledare/kolumner/peter-wolodarski-nya-karolinska-blev-en-skandal-i-stallet-for-ett-skyltfonster/</a>

they all underline that it rested on a strong reliance on certain abilities of the private business landscape.

The county politicians almost totally espoused the advantages of PPP in terms of innovation, quality and cost control, argues Ennart and Mellgren (2015). Furthermore, the authors reveal the politicians' trust, to a large extent, was grounded in PPP analysis presented by private consultancy firms, with Öhrlings PricewaterhouseCoopers (ÖPwC) and Ernst and Young as the two leading voices, while research experience of this type of private-public collaboration was neglected. Also, Sundström et al., (2018) finds that the political vision of the NKS PPP project from the beginning to date was to utilise the efficiency of the private setting. The authors find that this ambition was based on general and principal assumptions of the forces that should guarantee these advantages.

That the political vision behind the NKS PPP project was shared among politicians in Stockholm County – from the right wings to the Social Democrats – is shown by Öhrming (2016). All parties besides the left expressed a common view concerning the PPP arrangement and the benefits that the competitive situation of the private sector would guarantee. Örhming also underlines that the order to utilise these benefits, the traditional public health care norm of how to deal with construction projects, was broken. The functional requirement that traditionally was settled by the professionals in interaction with the public procurement body preceding and steering the design of the building, was made into an issue for the PPP company to deal with. Although the managing of the healthcare activities of NKS falls out of the research interest of this paper, it is interesting to note that these activities also are coloured by conventional market assumptions. Meiling (2018) reveals that behind the introduction of the Boston Consulting Group's (BCG) so-called 'value-based health' model, which in practice works as 'value-based competition' between different diagnoses, neoliberal economic ideas on homogeneous and independent health care activities can be outlined.

Hence, previous research points at the Stockholm County politicians' great trust in market forces as depicted in conventional market theory, and that this reliance is nothing unique, but shared by politicians and policy on national as well as on EU levels. In the following section we take a closer look at the politically/policy expected interaction patterns that motivated the NKS PPP solution. We start with considering the contemporary expectations of public-private collaborations in general, and the assumed economic interaction patterns they rest on, to continue with the specific NKS construction case. We then examine how these assumptions appear in relation to the empirically identified interaction pattern of the construction industry.

## 3.1 Advocating public-private collaborations

The idea that a closer collaboration between public and private interests is beneficial for economy *and* society – with positive effects on the content and utilisation of public resources – is advocated by politicians and policy makers at various levels. More precisely, the ambition is to exploit the private setting's specific characteristics of economic exchange, to make the utilisation of public resources more efficient. This ambition is present on the OECD and EU level as well as in the single member states; on regional as well as local levels (Rider et al.,

2013; Eklund and Waluszewski, 2015; Eklinder and Linné, 2017).

An important component of the neoliberal market thinking is to use the basic 'market mechanism' to make the public sphere more efficient. It has two major implications: Firstly, it implies a break with the classical political liberalism's idea of steering the public setting on the basis of the agreement of certain societal values through public agencies using hierarchical means to design activities and create resources in relation to them (Rider and Waluszewski, 2015). Secondly, which is the main concern of this paper, it implies a belief that the private business landscape is characterised by forces working according to some clear principles, that is, by mechanistic reactions instead of 'thick' interactions concerning the content and consequences of the exchange (Håkansson et al., 2009; Eklund and Waluszewski, 2015).

A neutral mechanism – competition – is seen as creating a more or less friction free and costless exchange between involved and informed actors, forcing them into a continuous search for efficiency. The efficiency and innovation in the business landscape is assumed to be created by this 'invisible hand' of competition. A less obvious implication here is that exchange and all changes in the system are 'automatic'. All types of changes of products and services are assumed to be reacted on, and if their relative performances are better than existing ones, be absorbed without any restrictions or obstacles (Håkansson and Waluszewski, 2013).

Hence, the basic tenet to achieving benefits of public-private collaborations rests on the explicit or implicit assumption of different interaction patterns in the public respectively the private setting. By transforming public goods to commodities and making them available for the private setting a more efficient utilisation will be reached with benefits for the private *and* the public setting.

The source of this thinking can be traced to a number of neoliberal economists who, since the second half of the 20<sup>th</sup> century, have advocated the idea that civic or public goods could easily be transformed to commodities through a bundle of legal rights (with Coase, 1960, as the main inspiration) and that the market is an ideal processor of information (with Hayek, 1948, as the main inspiration). Furthermore, to make knowledge advancements made in the public setting available for market exchange has been argued to be critical for economic growth (Arrow, 1985). Mirowski, (2011) characterises these voices as follows:

"Ultimately, a different cadre of neoliberal economists cut through the confusion by pledging their troth to two principles: 1) there was no such animal as public good, once you looked at this thing properly, and 2) all knowledge was always and everywhere adequately organized and allocated by markets, because the market was really just one superb information processor." (Mirowski 2011, p. 61)

With this assumed interaction pattern of the private setting at hand, politicians and policy are motivated to take a much more active approach to promote 'market-like' interactions in the public domain and, furthermore, to reduce rules that limit such patterns from occurring in public-private exchanges. In other words, policy makers and politicians are encouraged to break with the classical political liberalism's notion of *a distinct border between public and* 

private interests, and especially with the passive notion of a *laissez-faire* economy (Mirowski, 2011, p. 27). Instead they should both actively engage in blurring the public-private borders and mimicking the interaction pattern assumed to characterise the private setting in the public sphere.

Over the last decades there are also a number of public goods that, through different types of political arrangements, have been transformed into tradable commodities and objects for market-like exchange, within such areas as academic research, health care, education, etc. Hence, the contemporary political idea is to utilise the interaction pattern that is *thought* to characterise private business exchange: that is, independent actors exchanging homogeneous resources and utilising the price mechanism as an information processor – features that rarely are found in empirical experiences of private business exchange.

What's been assumed away in these arrangements are the empirical experiences of interaction – that is *active parties on both sides of the exchange interface*. Whether a private-private or private-public exchange process, interaction, including consideration of how the exchange affects existing social and material resources and activities on both sides of the interface, is necessary in order to cope with efficiency and renewal issues (Håkansson et al., 2009; Axelsson and Wynstra, 2017; Gadde and Wynstra, 2017; Harrison and Håkansson, 2006). Hence, the latter research experiences stress the need for both public *and* private actors to be prepared to actively engage in identifying and adapting directly and indirectly related social and material resources across organisational borders and to consider their pros and cons. In the next section we will take a closer look at what such engagement implies.

## 3.2 What if interdependencies and investments in place characterise both sides of the public-private interface?

Without a doubt, public-private collaborations have a long history, from the Bible's Matthew, the private tax collector, to private railways emerging in the 18<sup>th</sup> century, and a number of energy and other infrastructure investments in the 19<sup>th</sup> century (Hodge and Greve, 2007; Hughes, 1994). Hence, over time, numerous social and material resources used in the public setting were procured from private suppliers, from standardised commodities to advanced technologies utilised, among others, in infrastructure, energy and health care investments. The emergence of new technology-based user-supplier interfaces has often benefitted from a heavy state engagement, sometimes visible, sometimes more or less hidden (Hughes, 1983; Weinberger and Trischler, 2005; Malerba, 2002; Lundin et al., eds 2010; Waluszewski, 2011). The Swedes have a long tradition of public-private interaction involving technological development. As Sörlin and Wormbs, (2010, p. 144) puts it:

"By around 1970 it was already an established fact that Swedish industrial innovation in several areas – railways, hydroelectric power, defence technology, nuclear power, and telecommunications, to mention some of the most important ones – had relied heavily on state technology procurement."

However, the benefits of these types of public-private collaborations were *not* designed on the market principles drawings. The outcomes were not the result of any automatic principle, but by *two active sides*, where both the public procurer and the private supplier engaged in long-term problem-solving processes stretching across organisational borders. These processes could require substantial changes of material as well as social resources with benefits and costs that were difficult to predict in advance, and furthermore, presented themselves differently to the actors involved (Hughes, 1983; Lundin et al., eds 2010; Håkansson et al. 2009).

The reason is that the material and social resources involved are *not*, as assumed in neoliberal economic thinking, homogeneous and easily interchangeable and combinable. The consistent empirical picture shown in empirical based, process-oriented research (van de Ven et al., 1999; Marglin, 2011; Håkansson et al., 2009 for an overview) runs contrary to the notion that resources are homogeneous 'commodities' and can be traded as such. Creating an economic exchange that is efficient for both sides of the exchange interfaces requires more than a 'transfer' of commodities (given and well defined). It requires an active engagement by representatives of different systems of social and material investments in place in the using, producing and developing settings, characterised by different economic logic. Resources on both sides of the exchange interface might have to be changed and adapted to each other, related to different using or producing systems settings (Håkansson et al., 2009; Waluszewski, Håkansson and Snehota, 2017)

One important consequence is that any change of an exchange interface always has unforeseeable consequences. To deal with wanted and unwanted consequences of exchanging and utilising resources, business actors are forced to interact, something that drives the emergence of business relationships/interactions over time. This implies that involved resource combinations are embedded into larger resource constellations, and that social and material investments in place have a great impact on the direction of efficiency and innovation measures. To take advantage of investments in place, the embedding process on both sides of the exchange interface need to be engaged in the embedding process. There must be two active sides embedding the exchange object into the producing side as well as the using setting. This implies that the exchanged object is the result of an interaction process where resources on both sides have been utilised and affected (Håkansson et al., 2009; Waluszewski, Håkansson and Snehota, 2017).

Hence, the empirical pictures reveal that the private business setting, or 'the market', is not a place where companies can instantly change exchange interfaces. Rather, this line of research sheds light over the intricate patterns of social and material resources in place and the interdependency of resources, activities and actors they create. The private setting is as substantive as the public. It cannot absorb new information and new knowledge without effort – across company and organisational borders. Furthermore, any such transformation generates new knowledge – breeding reactions against or for the undertaken change. The importance of prior investments and interdependencies in both public and private is striking, even though it

is inspired by different logics (Håkansson et al., 2009; Waluszewski, Håkansson and Snehota, 2017).

One important consequence is that the interface between the private and the public setting is intriguing. Firstly, there is a significant difference in terms of the interests of the public and private sides. On the private side, the interest of those directly involved always has an ingredient of rent seeking. On the public side there is a general public interest – for example to provide equal health care – but also others of the politicians and professionals directly involved or affected. Secondly, any public agency interacting with a private firm will be confronted with rather different sets of organised activities based on different sets of social and material investments in place. That is particularly true in relation to infrastructure investments in the health care setting; the organised activities of the public and private sphere are of very different kinds. The first is based on a public responsibility to provide public health care based on professional experiences, the latter is based on constructions firms' private interests embedded into social and material investments in place that, furthermore, are adapted to fit into those of other construction-related firms.

Thus, neither the public nor the private counterpart is an isolated 'island' – each is part of a 'main land'. That is, each is embedded into a whole set of social and material resources that are activated in different ways in relation to different actors. Each side has to recognise and work in relation to its own – and its counterpart's – 'main land'. This implies that any exchange process between such counterparts has to include consideration of how to embed the solution exchange in their respective 'main land' of resources, activities and interests.

In an exchange process, where the object is highly complex, such as in infrastructure investments in general and in hospital investments in particular, there are a number of different interests that must be united and a number of social and material investments in place that have to be related. A hospital has to fulfil a number of tasks in relation to the public setting and it must provide a large set of advanced social and material resources in relation to different professions. Furthermore, it must utilise highly advanced medical equipment, products and methods provided by private companies. Hence, it has to be designed in relation to social and material resources and interests represented by the public as well as the private side. Several of these public and private resources and interests have no regular connection to construction, but have to be considered during the whole construction process. To summarise: in order for the exchanged object to contribute with benefits on both the producing and using side, both sides, whether represented by public or private actors, must interact intensely to develop its directly and indirectly related interfaces. In the next section we discuss the characteristics of the private setting – not as it presents itself in empirical research, but rather how it should have been constructed – in order to fulfil the political expectations on the public-private-partnerships.

4. What's missing, more bidders or a deeper understanding of the private business landscape?

Stockholm County's reliance on the ability to utilise, as it was expressed in the motivation of the decision, the "competitive situation of private firms" to increase innovation, quality and costs control rested on the opinion put forward by private consultancy firms, with Öhrlings PricewaterhouseCoopers (ÖPwC) in the foreground. The fact that the same private firms are utilised in a traditional procurement were not discussed by the consultancy firms. Furthermore, the fact that Stockholm County's construction and facility manager, Locum, had extensive experience in interacting with both suppliers in the construction setting and with professionals in the user setting as well as with their med tech equipment suppliers was not referred to. The loss of an important source of competence that followed by replacing Locum's traditional role as a project leader with the PPP company established by Skanska/Innisfree was simply not touched upon (Sundström et al., 2016; Öhrming 2015).

Stockholm County's motivation in adopting PPP in the NKS case closely followed ÖPwC's: "PPP gives highest possibility to value creation since it gives incentives to innovation and optimised investments and operating costs over the life cycle" However, how these incentives are thought to work in a PPP was not explained. The content and function of PPP was only mentioned on a high level of abstraction with a focus on the positive aspects, ascribing it features such as "decreased risk for running costs, since the risk mainly is transferred to the private partner". 12

As discussed above, and as Stockholm County's own construction and facility managing company, Locum, is an example of, public and private collaborations is nothing new, contrariwise. However, what is new in the contemporary idea of public procurement in general, and in PPP in particular, is *the rough simplification of the complexity of the private setting*, and more precisely, of the challenge of creating working interfaces between the producing and using setting, whether private-public or public-public. Through relying on the stylised view of the private setting expressed in the market logic, the interdependencies between social and material investments in place on both sides of the exchange interface are neglected, as were the interactions and relationships necessary to cope with them.

This implied neglecting the complex issue of all interfaces that had to be created in relation to NKS, involving producers as well as users, where social and material solutions supplied by construction companies have to be made compatible with social and material solutions supplied by the med tech and IT companies *and* with health care practices. Instead, these issues seemed to be considered as 'automatically' solved by choosing a PPP solution with a focus on a flexible' building<sup>13</sup> (Öhrming, 2015; Sundström et al., 2016).

An interesting and disputed aspect of the NKS PPP project is that in the end there was only one bid – the one presented by Swedish Hospital Partners AB (SHP), with Skanska and Innisfree in behind. The original Stockholm County plan, based on the PwC and Ernst &

<sup>&</sup>lt;sup>10</sup> <u>http://www.nyakarolinskasolna.se/globalassets/nks-rapport-1---beskrivning-av-ops-upphandling.pdf</u>, p. 49. Author's translation.

<sup>&</sup>lt;sup>11</sup> Öhrlings PricewaterhouseCoopers and SLL, Stockholms Läns Landsting (County of Stockholm) 2007, p. 7

<sup>&</sup>lt;sup>12</sup> Öhrlings PricewaterhouseCoopers and SLL, Stockholms Läns Landsting (County of Stockholm) 2007, p. 7

<sup>&</sup>lt;sup>13</sup> Öhrlings PricewaterhouseCoopers and SLL, Stockholms Läns Landsting (County of Stockholm) 2007, p. 7

Young reports, was to require at least three bidders. Both PwC and Ernst & Young stressed the need for competition in order to reach lower investment and maintenance costs and innovativeness; something that should be guaranteed with 3-5 bidders (Ennart and Mellgren, pp. 91-92; PwC, 2007; Ernst & Young, 2008).

When it became clear that there was only one bid, the responsible politicians in Stockholm County turned to another consultancy company, Stockholm-based Gullers, for advice. If Skanska/Innisfree knew they were the only bidders, the competition forces would not work, Gullers replied, and recommended a new, traditional procurement process (Ennart and Mellgren, pp. 92-93). The politicians turned to yet another consultancy Swedish-based company, JKL, which argued that the competitive forces of the private setting would still work even if there was only one bid. A consulted law company also determined that the decision to go for the Skanska/Innisfree bid was in accordance with the public procurement regulation. However, the fact that there was only one bid created a heavy dispute among the politicians in Stockholm County. The left-wing parties of Stockholm County argued that in order for the competitive forces to work there was a need for three bids, and required abandoning the PPP project when it did not attract more than one bid. The right-wing parties, which had the majority in the county, claimed that even if there was only one bid, the actors in behind were still exposed to the competitive forces of the private setting. In the voting May 4, 2010, the decision to go for the Skanska/Innisfree bid was taken<sup>14</sup> (Ennart and Mellgren, pp. 96-98).

The fact that the goal of three bids was never reached became a key issue also in the criticism presented in the media, especially when it became evident that the NKS PPP project was surrounded with running costs and severe quality and functionality problems. As summarised in the Swedish news magazine *Focus* (2 November 2017) by journalist Samuel Lagerkrantz:

"When the giant affair should be procured in 2010 it appeared that there was only one bidder, the construction company Skanska. This is where it started to go wrong. The whole idea with a procurement is that several alternatives should be weighing against each other – and now the county was standing with only one alternative." [...] The decision to not redo the procurement has got hard criticism, mainly from the social-democratic opposition, but also from right-wing politicians. When only one bid came in it should have been redone. That's what almost everyone reckons today." <sup>15</sup>

Absent from the discussion of the NKS PPP procurement process was the ability for the private setting to deliver cost control and innovation if there had been three or more bidders. Neither the left-wing and the right-wing, nor media criticism, seemed to reflect what's required for bid acceptance among three or more bidders to deliver the expected higher level of cost control and innovation. All seemed to accept the idea that this should be guaranteed

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<sup>&</sup>lt;sup>14</sup> <a href="http://www.nyakarolinskasolna.se/globalassets/politiska-beslut/lf-beslut-8-juni-2010.pdf">http://www.nyakarolinskasolna.se/globalassets/politiska-beslut/lf-beslut-8-juni-2010.pdf</a> (Authors translation)

automatically by the 'competitive situation' of the private setting. Neither do the published studies engaged in the construction and design aspect of the NKS project, Mellgren, (2015); Öhrming, (2016); Sundström et al., (2018) scrutinise the underlying idea of what's able to be achieved through a competitive bidding process. It is only Meiling (2018) who explicitly shed light on the role of the underlying assumptions of autonomous actors, homogeneous resources and independent activities, but then only concerning the design of the health care activities and the role of Boston Consulting Group, BSG, and not in relation to the construction project.

In the discussion below we consider what features a PPP company has to fulfil in order to be able to deliver both cost efficiency and innovation whether *there are one or many bidders*.

## 4.1 What is needed to make PPP dreams come true – Three basic requirements for the PPP company to fulfil

If the PPP solution is going to be beneficial for *both* sides of the exchange interface, given the conditions that characterise these contexts discussed above, the PPP company has to fulfil at least three basic requirements.

The first requirement is that the PPP company, as one unit, can effectively mobilise all necessary resources needed to create interfaces beneficial for the use and production of the constructed hospital in a cost efficient and innovative way. If the main production cost and the main changes necessary for innovation were carried out in-house and thus controlled by the PPP company, this could possibly be managed. However, the situation of any contemporary construction firm is rather different.

It is a well-known fact to those who operate and research the construction industry that whether the general contractor is working under a PPP contract or a traditional procurement, it is producing a minor part of the project. Up to 80-90% is produced by others than the general contractor; by sub-contractors and their suppliers. This implies that it is only about 10-20 % of the production cost and innovation that the general contractor can affect directly. To impose the criteria of cost control and innovation, the PPP company needs to force or motivate the others, all the subcontractors and suppliers responsible for 80-90% of the production costs, to engage in cost control *and* innovation despite the increased risk this implies. (For an overview of the basic characteristics of the construction industry and how they have emerged over time, see e.g. Crispin-Mazet et al., 2015; Bygballe and Ingemansson, 2014; Håkansson and Ingemansson, 2013; Gadde and Dubois, 2010; Winch, 2002; Bresnen and Marshall, 2000; Eccles, 1981; Cox and Goodman, 1956).

However, there is no advantage for the sub-contractors and their suppliers to take an economic risk just because the counterpart is a PPP company. This is also illustrated by the fact that all large Swedish construction companies, except Skanska, were very reluctant to engage in the NKS bidding process (Ennart and Mellgren, 2015, p. 103). The question of what parts the PPP company should need to be in charge of in order to induce others to engage in

and invest in innovation, which in practice means novel, risky and economically demanding ventures – along with promises of cost control – were *not* touched upon by the private consultancy advisors, or by Stockholm County. Instead, this issue was assumed to be solved automatically by the 'competitive situation' of the private setting. The basic consultancy and political idea was that this mechanism should be put into practice through at least three bidders competing against each other as the basic consultancy and political recipe. The interpretation made by Stockholm County's right-wing majority was that it should also work with one bidder, as long as it did not know that it was the only one when working out its offer.

Hence, what is absent in the discussion is the fact that the construction that the PPP company is supposed to deliver is dependent on social and material resources that do not exist in-house, and thus are out of its direct control. This implies that any PPP company, whether chosen in a competition among several or if it is the only one, has to induce all external suppliers and subsuppliers involved to engage in a much more encompassing commitment as compared to traditional procurement – in order to fulfil the innovation and cost control requirement. No PPP company can achieve this without promises of economic compensation, directly or indirectly in terms of, for example future increased orders, increased development capabilities, sharing of competence, etc. None of that was at hand for the suppliers and subsuppliers engaging in the NKS case, where the PPP company was designed by two 'average' actors within the established network.

A related mobilisation issue is that the financing was handed over to private actors. The PPP could not achieve better loans compared to public borrowing, especially since they were negotiated in the wake of the 2007 financial crisis. The extra costs for loans was estimated to be about Euro 30 million per year or Euro 300 million per decade (Ennart and Mellgren, 2015, p. 37). The belief of Stockholm County management was that the value of the benefits that the PPP solution should create in terms of cost control, quality and innovation, should compensate for the significantly higher costs of private borrowing.

The second requirement is that if a PPP project is going to be innovative, it requires activating the using side. However, in contradiction to Stockholm County's own construction and facility management company, Locum, the PPP company has no established relationships activated on the using side, that is to the Karolinska hospital health care setting, its med tech suppliers, its professionals and other related public health care interests. The public using setting is more or less cut out of the construction process. The using side only exists and is present in terms of a set of previously stipulated standards (that can never be fully exhaustive or stabilised). Instead of an active relationship between the public procuring and private producing sides; constantly interacting concerning how to reach beneficial producer-user interfaces, the NKS PPP solution turns out as a partnership between a passive user side and a producer side neglecting the user issue.

Bringing the using side into the exchange is always demanding as it involves confronting different – and often opposing – logics. Avoiding involving the using side more systematically in the PPP can certainly make the construction process easier, but the draw

backs will, as in the NKS case, become evident when the construction becomes a problem when health care activities begin. If not adapted to health care needs in the original construction phase, the adaptations have to be made later on resulting in increased costs. Instead of a one-sided process where only the producing side is mobilised, as in the NKS case, an effective economic interaction has to be built in an organising process on both the using and the producing sides, where different social and material resources, activities and related actors are mobilised, brought together and confronted. This in turn requires an organisational solution that is much more balanced in terms of involving representatives from both the using and producing side than the NKS PPP solution.

The third requirement, in order to fulfil the promise of cost control, quality and innovation, the PPP must have the capacity to monitor how the standards and clauses stipulated in the PPP contract are followed, and in their development and adaptation as the project advances. The using side has to be able to suggest adaptations of basic standards in relation to medical equipment and/or treatment methods and routines, etc. and the contractor must have the right to add these costs. A PPP contract based on standard solutions not adapted to specific health care activities – as in the NKS case – implies a lot of situations with added costs. If the public actor is not involved, represented both in terms of experiences of construction issues in relation to a using health care setting and in terms of experiences with the specific health care use, the ground for the costs of adaptations will be beyond the insight and competence of the public actor. Thus, an effective solution requires capacity not only to monitor but also to support and participate in joint development of novel solutions as the project advances.

Hence, instead of a deep investigation of a) the specific health care requirements on a new hospital in the Stockholm region, b) of the function of the business landscape related to construction, and c) of the advantages *and* drawbacks of PPP, Stockholm County's ambition stopped at the idea of utilising the 'competitive situation of the private sector'. This must be considered as 'magic wishful thinking'. Knowledge and experience of construction researchers and independent experts were not utilised, and the long-term engagement and competence of construction for health care activities available in Stockholm County's own construction and facility management company, Locum, was bypassed. Ironically, although Stockholm County's ambition was that NKS should lift the region in the ranking of 'world class research', the interest in utilising research experience, both concerning the producing construction setting and the using health care setting, was low, as well as that of using the competence of the health care professionals. Experience from research in different disciplines, as well as in construction and health care practice, could have been used to scrutinise vague promises of innovation, quality and cost control put forward by private interest groups (as the consultants).

## 5. Conclusions

Given that the public side neglected the interactivity and interdependency of the private business setting, the disappointment with the NKS PPP project appears *not* as an odd deviation. Rather, it seems to be a *natural consequence of a public side expecting autonomous* 

actors able to deliver innovation, quality and cost control just because they are exposed to competitive forces, but in reality interfacing with private actors whose interests are directed to interdependent investments in place, with their own and related suppliers' (Håkansson and Waluszewski, 2013; Håkansson et al., 2009, pp. 235-260).

The negative side effects of the NKS PPP project are certainly startling, but it still offers an illustrating picture of how the idea of the competitive market forces were used – and misused – in the public setting. The competitive forces of the private setting are assumed to function in an automatic way and to breed not just cost efficiency and quality but also innovation. Furthermore, there is also an assumption of speed and ease of change. All actors are assumed to be free and independent to instantly choose whatever counterpart, and to instantly be able to go for innovations in terms of utilisation of social and material resources. With the trust in these characteristics of the private setting at hand, politicians have a 'cart blanche' to withdraw from direct involvement in the creation of producer-user interfaces, and furthermore, to also hinder related public users from engaging in this process.

Empirical based, process-oriented research on economic exchange, whether in the privateprivate or public-private setting, outlines a rather different picture of the private business landscape. Instead of being a simple mechanism, economic interaction between companies and organisations takes place in a setting where they are embedded into resource and activity structures that are produced, used and mobilised by a multitude of actors, with often contrasting interests. Economic interaction has a content – material as well as social – and this content will affect related resources and activities on both sides of the exchange. To be beneficial for both sides of the exchange interface, the producer and the user settings, the interaction has to be actively organised by the counterparts in relation to each parties' internal resources and activities, and furthermore, in relation to indirectly related social and material resources and how they are activated. It goes without saying that such a process is not smooth or automatic, but includes both conflicts and shared interests. An important consequence is that actors on both sides of the exchange interface, in order to represent their specific interests, must engage in specifying them and in concrete problem-solving processes. Hence, directly and indirectly related resource, activity and actor structures in the private and public setting have to be involved. What differs between those involved on both sides of the exchange interface are the interests and social and material investments in place, what needs to be reconciled is how they can be linked in ways that are beneficial for both sides of the exchange interface.

These characteristics have substantial consequences for the public-private interface. As soon as the exchange concerns goods that cannot be transformed to or treated as homogeneous 'commodities', as most often is the case of public-private exchange, there are reasons to be extremely careful in the design of the interaction interface. When heterogeneous resources (including knowledge and competences), rather than homogeneous commodities are involved in the exchange, they need to be represented at the interface. There are differences both in resource and activity structures between the two sides of the exchange interface and these differences have to be actively dealt with.

## 5.1 Managerial implications

The managerial implications of this paper includes a distinct message to managers on the public as well as on the private side, which can be concluded as follows:

There is a strong need for the public side to interfere. The public side should be very actively involved in any public-private collaboration, whether in terms of PPP or any other type of interaction. That means to *not* rely on the job being done by any simple market mechanism, as depicted in conventional market and PPP literature. Furthermore, it means to do exactly the opposite of what was done from the public side in the NKS case.

There are two main reasons why the public side should interfere actively in any public-private collaboration. The first is the need to *organise the exchange of information and knowledge* in the public-private interface. In order to be able to create benefits and overcome obstacles on both sides of the exchange interface, both the public and private sides have to actively structure their engagement. That is, representatives for related professionals and different expertise on both sides of the interface have to be engaged, along with experienced managers.

The second reason is the need *to initiate and handle dynamics* in the interface over time; in terms of changes in the design and performance of activities and combination and use of resources. Efficiency and innovation can only develop through a very active interaction process where both sides must be involved.

To conclude, whether private-private or public-private, in order to be beneficial for both sides of the exchange interface, both sides have to engage in the exchange – with representatives who have knowledge and experience in all directly and indirectly related social and material resources that will be affected. The need to mobilise and involve representatives with extensive experience of specific resource combinations of both sides of the exchange interface; the public as well as the private, does not disappear simply because it is assumed away – as the NKS PPP case reveals.

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