Is there a hierarchy among activities, resources, and actors in business networks? Exploring the relationship between the components of the ARA model

Katarina Arbin, Johan Kask, and Frans Prenkert

Örebro University School of Business, Sweden

ABSTRACT

In the original setup of the Actor-Resource-Activity (ARA) model, no one component is given precedence or greater significance than any of the other two as it assumes conceptual equality among the three. Nonetheless, this paper encounters an empirical context in which this assumption does not seem to hold true; is it, thus, possible that – in some specific empirical contexts – the relationship between the components of the ARA model change from being of equal conceptual character into a hierarchical-type of relationship? If so, is it possible to discern – contrary to the original conceptualization – a hierarchy among activities, resources and actors in the ARA model? The aim of this paper is to discuss and question the equality-assumption of the ARA model to enrich and complement our understanding of the relationship among its components. It shows that, at least in empirical contexts where resources are heavy and site-specific, the relationships between the components changes and turns into a more hierarchical character. We support this claim with data from a two-year longitudinal case study (2015–2017) of a European transportation network.

Keywords: ARA Model, Theory Development, Industrial Networks, Physical Resources

INTRODUCTION

Within IMP, the ARA model (Håkansson & Johanson, 1992) provides a now well-established, taken-for-granted, unquestioned conceptual framework of business to business interaction. It has been central to our understanding of the substances and functions of business relationships. The model implies that the nature of a business relationship can be portrayed in terms of three interconnected and equally important layers: the activity layer with activity links, the resource layer with resource ties, and the actor layer with actor bonds (Håkansson & Snehota, 1995).

In the original setup of the ARA model, no one component is given precedence or greater significance than any of the other two. Each component is conceptualized as being at the same level. In addition, each layer is being both enabled and constrained by the actor webs, the resources constellations, and the activity patterns in the wider business network. Conversely, each layer of a business relationship (activity, resource and actor) also influences the wider network at the network level at its corresponding network layer. It is, hence, suggested that the three components are mutually dependent and mutually connected (Håkansson & Johanson, 1992). Thus, the model establishes not only the conceptual relevance of all three components in the model as important when, for example, parties seek to economize on specific network connections, it also assumes conceptual equality among the three (Håkansson & Snehota, 1995). This equality-assumption is inherent in the conceptualization of the original ARA model and is rarely – if ever – questioned. Perhaps for good reasons. Yet, we have encountered empirical contexts in which this assumption does not seem to hold true. Is it possible that – in some specific empirical contexts – the relationship between the components of the ARA model change from being of equal conceptual character into a hierarchical-type of relationship? If so, is it possible to discern – contrary to the original conceptualization – a hierarchy among activities, resources and actors in the ARA model?

This paper questions the inherent equality-assumption of the ARA model assuming the three components of the ARA model to be of equal conceptual importance. While they are mutually interdependent, we claim that there can exist a hierarchy among the components, where situated resources and resource ties has precedence over activities and actors because they enable and constrain the set of possible actor bonds, both spatially and temporally, which in turn colors the possible activity links.

We support this claim with data from a two-year longitudinal case study (2015–2017) of a European transportation network. Interviews with key persons in the network together with observations at meetings and reviews of secondary documentation show that in this context resources are often heavy in term of investments, immobility and site specificity (e.g., Håkansson and Waluszewski 2002; Baraldi, Gressetvold et al. 2012; Prenkert 2016) and become the precedence in the selection for partners and activities.

The aim of this paper is to discuss and question the equality-assumption of the ARA model to enrich and complement our understanding of the relationship among the components of the model.

The paper contributes to the development of the original ARA model showing that, at least in empirical contexts where resources are heavy and site-specific, the relationships between the components changes and turns into a more hierarchical character as contradistinctive to the original conception with mutually interdependent non-hierarchical relationships between activities, resources and actors. This insight can be important for managers seeking to explore economies and to innovate in business networks as the nature of the relationship between the components is likely to influence both the tactics and the outcomes of such attempts. The paper is organized thus. Next, we discuss the methodology used to illustrate and substantiate our claims relying on a logistics case which is introduced in the section to come. After that we analyze the case focusing on the relationship between the ARA components. We conclude the paper with a discussion of the results and some of its implications for investigations of business networks using the ARA model.

METHODOLOGY

Qualitative case research

Methodology used is a qualitative case study providing us with rich empirical description of the case. The use of case methodology is commonly used when investigating and discussing business networks and i.e. the ARA model. It benefits the dynamic and contextual characteristic of network phenomena and is thus well suited to capture interactions, processes and structures (in terms of contextual conditions). Our ambition is to use the case to provide interesting empirical descriptions paired with new theoretical insights as a way to develop theory (Vaughan, 1992; Eisenhardt, 1989).

Data collection

A longitudinal case study has been conducted following a European network of logistic actors in a rail transportation context over a two-year period of time, from 2015 to 2017. Within the case study semi-structured interviews with key persons in the logistic network has been conducted together with observations at meetings and documentation studies. Also group interviews have been conducted. Altogether around 25 interviews were conducted with persons in 6 different companies with different roles, such as goods owners, terminal operators, logistics organizer, etc. On average the interviews lasted for two hours. The interviews were recorded and parts relating to the case were transcribed. After a first case description had been produced it was sent back to the persons interviewed for respondent verification. Following this the case were complemented in order to ensure factual accuracy and relevance. While some actors may have slightly varying views on what is going on, in this way facts and figures were quality assured. Following revisions the case was again sent to the interviewees who approved it.

As a complement to interviews a number of site visits were conducted in which for example, a terminal operations and layout were experienced firsthand by the researchers.

Finally, whenever secondary data in terms of company records, web-site data and information from industry journals and agencies could be found, this was incorporated in the case to provide depth and nuance. In this way multiple qualitative data sources were used to build a case (Yin, 2009).

Analyzing the case

We analyze our case using a structure from the empirics itself in which the southbound flow, the northbound flow and the terminal operations emerged as a natural way of separating the case based on its different characteristics respectively. This means that we first describe the character of the three logistics activities and then analyze them in terms of what it informs us about the relationship between the ARA components.

RESEARCH SETTING: THE SFL CASE

Scandfibre Logistics (hereafter SFL) is a logistics company which is owned by the major Swedish paper firm *BillerudKorsnäs* (hereafter BK). The aim of SFL is to provide efficient railroad solutions to its owner and other Swedish paper producers. These actors produce mostly carton and packaging paper in Sweden and Finland for the European market with major customers being *Elopak* and *Tetrapak* with conversion factories in e.g. Italy, Spain, Germany, and the Netherlands. As SFL do not own, nor fully control, the infrastructure, the transportation of paper to the owners' customers southward involve a range of specialized actors such as train operators (e.g., *Green Cargo* in Sweden, *Deutche Bahn* in Germany, and *SNCF* in France), wagon rental companies (e.g., *Transwaggon*), rail infrastructure owners (e.g., *DB Netz* in Germany, and *NS Railinfratrust* in the Netherlands), and not least freight terminals (e.g., *Innocenti* in Italy, *Zimmerman* in Germany, *Verbrugge* in the Netherlands and Belgium, and *Logifer* in France) as well as a large number of connection- and shunting points in many countries along the rail network in Europe. In addition, as railroad transportation from paper mills to packaging converters have some infrastructural constraints, road transports are also included in the system to cover the last mile from terminal to destination when rail-connections are lacking. Thus, truck operating freight forwarders are in many cases involved to cover this last leg.

Between 2011 and 2016, SFL's operations were governed under one single procured package. This packaged railway logistics system is referred to as Rail-11 by SFL and it specified routes and slot times for departures, as well as the conditions for wagons, locomotives, and operations, etc. In Rail-11 SFL took the full responsibility, cost and risk for each wagon round-trip (e.g., from Sweden to Italy and back). In order to balance the pool of wagons in the European system over time the number of wagons leaving Sweden had to be approximately equal to the number of wagons entering.

In the Rail-11 system, SFL had to make sure to bring the wagons back, fully loaded or not. Thus, a way to cover (some of) the cost of paper transportation was to rent out cargo space in the empty wagons on the return journey north to external customers. The Rail 11 system is based on a system of wagons being leased from *Transwaggon*. These wagons are best utilized if the flows in and out of Sweden is balanced. Of course, this is impossible to do perfectly, but SFL seek to balance the flows as much as possible because the alternative is costly. When it cannot be done, SFL have the option to – at a cost – release a wagon back into the *Transwaggon* wagon pool at the site in Rail 11 where it currently is. In the same way SFL can – at a cost – insert a wagon from the wagon pool at particular sites in Rail 11 should they need to due to load requirements, unexpected shortage of wagons, etc. Yet, it is in general preferable to bring a wagon back if it can be rented out, compared to releasing it at a cost. To further complicate the calculations, SFL pays a wagon rental per day. Thus, they have to weigh the number of days stagnant versus the cost of paying to get rid of them instantly after off-loading, and then rent new wagons when they need it.

SFL's transportation system, as well as the business network that collectively organizes this system, have a range of other conditions, constraints and opportunities too, that we are about to return to later. As the network case is rather complex and involves a large number of actors, we will analyze the case according to the structure presented earlier.

ANALYSIS: WHAT OUR CASE INFORMS US ABOUT THE ARA COMPONENTS

In this section we follow the structure described earlier in the methodology section using the three logistics activities as a basic structure. Thus**,** we first look at the southbound flow, then at the northbound flow and finally at the European terminal operations. These three logistics activities serve as three separate illustrations of our research issue.

The southbound flow in Rail 11: The paper machine is king

In the process of converting timber to paper, logistics is important, but yet secondary to the paper-making machines in the mills. The paper machine is the king that governs all other operations. As one manager expressed it:

"The paper machine is the king in our system. When it works well and without interference, we let it run and rather we will adapt all other operations" (Manager Mill Logistics, BK, 10 June 2015).

Both before and after the conversion of timber to paper, many of these Swedish paper mills use the railway for their logistics. The timber trains use special open wagons, while the paper rolls are transported in traditional goods wagons for palletized goods with large doors along the sides; so-called, sliding walls. This case study only highlights the latter. In this flow, as production output from the mills determines the number of wagons needed, it is sometimes problematic that wagons and slot times for operating trains must be booked long in advance due to bureaucracy and complexity of the rail infrastructure itself (Manager Mill Logistics, BK, 10 June 2015). The paper mills try to minimize warehousing at the sites, even though they will not let, for instance, lack of available wagons slow down production when the paper machines are at full capacity or have a high-volume top-of-capacity streak, which they sometimes have; in these cases, they scramble wagons to the production sites and use these as temporary warehouses while waiting for resources such as loco's or available slot times in Rail 11 to materialize and then ship the paper (Ibid).

Governed by the paper machine's production rhythm, the outflow of paper may vary: Overproduction means increased stock in the warehouses, while problems in the machine, or even a full stop, foil all transport plans. Rail transports are more sensitive to such disruptions than road transports. Normally the production is planned so that all orders are done in time for the rail wagons to arrive at the destination before deadline; by rail it takes normally some extra days to convey to the Maschen connection point south of Hamburg, from sites in Sweden, compared to sending paper rolls by road (Ibid). Consequently, when production orders are delayed, the paper producers choose to redirect flows from rail to road by adding trucks to meet short deadlines.

Therefore, deviations compared to plans in the production hits SFL's scheduled number of trains and wagons. Such changes happen all the time, as production planning staff at the sites re-schedule orders and change priorities based on the output from the machines (Ibid).

If the logistic controllers at SFL get timely information, the next train leaving the site may contain fewer wagons; because, SFL aim at not having any empty wagons depart from a production site in Sweden (SFL Logistics Planner, 22 May 2015).

At the southern end of the southbound flow, paper rolls are unloaded at terminals across Europe. When the train comes in, the wagons are released and unloaded, and the paper placed in the warehouse or loaded directly onto a truck for the last leg of the transport relay, or into containers for stuffing and overseas delivery (Manager Mill Logistics, BK, 10 June 2015). The terminals where the paper rolls are being unloaded are paid to unload/reload and store the paper goods.

The relationship between the ARA components in the southbound flow

This shows that the cargo capacity (number of wagons) in the northbound return flow is mainly determined by the output of the paper machines in Sweden. When any paper machine has a critical stop or if maintenance is conducted, fewer wagons are sent south, and fewer wagons therefore return to Sweden. This illustrates that in the southbound flow of Rail 11, resources such as paper machines and production facilities dominate over resources such as logistics resources in terms of wagons and slot times. It also shows that production resources impact the logistical activities. It is the pace of production that determines the pace of logistics and distribution. And the pace of production is determined by the production resources at the mills. Hence, our case informs us that heavy production resources dominate and determine logistics activities in a very clear way.

This indicates that in this case, the resource dimension is hierarchically superior to the activity dimension, when comparing production and distribution aspects of the economic activity. Of course, the picture may change if the perspective is changed. But given a focus on the relationship between production and distribution, our case informs us that production resources are hierarchically superior in relation to distribution activities as well as to other distribution resources. This we will return to in our discussion later.

The northbound return flow in Rail 11: Focus on load factors

While the southbound flow consists of paper rolls only, the northward flow (also referred to as the return flow) have more varying types of goods. To start with, any end-customer in Sweden must have a transportation need from producers in Europe to make a transport in the northbound flow happen (Logistics managers, SFL, 22 May 2015). Currently SFL offers their return business customers to rent whole wagons only; pallet-based cargo space is not offered. This limits the set of potential customers, but accordingly it is a business model that best match SFL's current administrative practices. It is simply impossible for SFL to track individual pallets in rail wagons at a reasonable cost (Ibid).

Because SFL do not offer palletized cargo services themselves to end customers, and such customers rarely have the knowledge in-house to organize the transports themselves, a need for middlemen arise. The middlemen positioned in-between SFL and the Swedish importers are either designated freight forwarders or proactive terminal firms that also acts as freight forwarders. Typically, the middleman in these operations coordinates goods from different manufacturers in the south (e.g. producers in Italy) to different end customers (grocery chains, wine and beer importers, tile importers, etc.) in the Nordic markets; SFL have in total about twenty such partners/customers functioning as middlemen regularly buying wagons in the return flow from continental Europe back to Sweden (Ibid). These palletized-cargo-service middlemen are, hence, critical buffers for SFL to realize a northbound flow with high load factors, that is, the ratio between available cargo wagons and the extend it is utilized. One logistics manager expressed the importance of high load factors in following way:

"In our business model, the precondition is that our owners pay for the southbound transportation as well as caring for that the empty wagons return; that is, taking the full responsibility for the whole loop […] Then we get contributions to the system for every empty wagon we sell" (Ibid).

For SFL to increase load factors from these sites requires that SFL themselves convinces one of their freight forwarding partners operating in Sweden to make an effort in filling the empty cargo space with goods from the area nearby one of their terminals that have a destination in Sweden. In such cases it is the partner, not SFL that have to take the full responsibility for collecting goods to the terminal, making a deal with the terminal to load wagons, for offloading at a Swedish terminal and deliver the goods to end customers (Ibid). SFL only provide the railroad link from start terminal to end terminal.

While buying whole wagon loads from SFL, the middlemen partners assume the economic risk in the northbound flow, but they are fully free to negotiate the price of their service with their own customers (e.g., a receiver in Sweden, or a manufacturer in Italy). SFL's faces the risk of not having the wagons rented, while the partners' risk is in not filling the wagons they pay for. In other words, despite the fact that importers have their shipments in SFL's trains, they do not pay SFL directly. In practice this setup requires SFL to work closely with its partners/middlemen to make sure there is enough freight to improve load factors in the northbound trains.

The relationship between the ARA components in the northbound flow

The Northbound flow has particular characters that to a large extend determine the set of actors involved. First, only middlemen come into question who are connected to terminal(s) to which the southbound trains supply wagons, and to terminal(s) in Sweden relatively close to a paper mill to which the return flow supply wagons for paper re-loading activities. Second, in most cases, the middlemen who rent wagons have already establish relations with terminals in both ends (for loading and unloading), and, without exceptions, such relations to site-specific terminals in both ends of the railroad link must be established before the goods handling and transportation selling activities can start. Here, the available terminal partners for the middlemen to establish relationship with is largely predetermined as only site-specific terminals located in the right area and with particular infrastructures (access to rail at the terminal and the equipment required) can be selected. In other words, only potential partners with site-specific demands for flows between point of loading and point of unloading near SFL's core lines of goods can enter into partnerships with SFL and increase the load factors; and, only site-specific terminals already attached to the system, or very nearby, can be selected for terminal operations in the northbound flow. Hence, this part of the case indicates also that the resource dimension is hierarchically superior to the actor and activity dimension, when comparing how collaborators are selected to reduce the number of empty wagons back to Sweden.

Terminal operations in Rail 11: Proactivity is key

In Rail-11, the majority of the terminals are not proactive, meaning that these terminal operators do not take action in helping SFL to increase the load factors. Such non-proactive terminals are for example port terminals located in Northern Germany or in the Netherlands. These terminals have only two functions: warehousing while awaiting onward transports, and reloading freight from rail to road or sea, or vice versa. Such a terminal is only a service supplier in the system and have no customer relation to SFL because they rent no wagons in the return flow. That makes increasing load factors by identifying new flows from such terminals quite complicated (Logistics Manager, SFL, 22 May 2015).

For instance, in the port of Hamburg, huge amounts of goods pass through every week destined for Sweden. However, shuttle container ships from Hamburg to Gothenburg take the largest share of this flow. For SFL, the cost of reloading such goods to their wagons is higher than the market price for the transportation, so when SFL ends up with empty wagons in Hamburg it is better to send them home empty than to take a loss on reloading (Ibid).

Another reason why many of the terminals, especially port terminals, are not proactive is because they are not in contact with end customers in in the Nordic countries who require transportation; hence, the port terminals have no incentive finding new customers or renting wagons in SFL's return system. Port terminals are usually specialized in consolidating railway wagons to container trans-shipments. If SFL considers new businesses to increase load factors from such a terminal, SFL must first convince any of their partners that already have business in Sweden that there is available capacity in the northbound flow (Ibid). Even then it is that partner, not SFL, who finds goods near the terminal, pays the terminal to engage itself in consolidating from truck or boat to SFL's wagons, and which has most of the contact with the terminals themselves, and which also handles distribution in Sweden.

At the other end of the spectrum are the terminals that proactively helps increasing load factors to improve the return flow themselves by also acting as middlemen. In the past few years in Rail 11, SFL in partnership with local railway terminals in Italy have managed to increase load factors dramatically. This is driven by the demand from Swedish importers and retailers: End customers such as *ICA* (the largest Swedish grocery chain) and wine importers of consumer goods produced in Italy (such as *Barilla*) have experienced that railroad transportation based on the otherwise unused northbound capacity in SFL's system is a rather cost efficient and environmentally friendly way to transport goods (compared to organizing its own distribution system or to base distribution on road carriers).

A proactive terminal is typically both a processing node that reloads freight from rail to road, or vice versa, and a freight forwarder that is actively involved in the Nordic market searching for end customers who need its services (Logistic Manager, SFL, 22 May 2015). In Italy, SFL have two such partners; *Innocenti Depositi* in Milan (hereafter *Innocenti*), and *DSV Saima Avandero* in Modena (hereafter *Saima*), the latter being part of the multinational Danish logistics company *DSV Group*. For SFL, these two terminal operators who warehouse and reload goods in both directions as well as rent wagons in the return flow for their consignees located north, are critical partners for the overall system to balance the northward and southward flows. The terminal manager of Saima in Modena puts it this way:

"We load and send Italian food and wine, and mechanical products, to our customers in Sweden and Denmark using the SFL system […] it is a joint collaboration […] a good system is an interesting tool compared to trucks […] We get out of the roads, more than 6.000 trucks [last year]" (Terminal Manager, Saima, 23 May 2015).

When, *Saima* and *Innocenti* forwards paper goods from one of its terminals by road to a paper converter factory (a customer of BK or one of the other mills) located somewhere in Italy they balance this flow by simultaneously return goods from this geographic part of Italy to customers in Sweden (e.g., Italian food to *ICA* from *Barilla*); in doing so, the proactively involved terminals use SFL's railroad from their own terminals in Italy to other terminals in the SFL network in Sweden as an link in the supply chain provided for end customers and importers in Sweden (CEO, Innocenti, 22 June 2015). In this case *Innocenti* buys the road transports in Italy back and forth from the terminal from local haulage companies. When delivering goods by truck to paper converters *Innocenti* becomes a link in the paper distribution system, while when they pick up goods for the northbound flow they operate for themselves and use SFL as a link in their distribution system (Ibid). *Saima* has, as well, a similar dual role of both being a terminal operator and a proactive customer.

The relationship between the ARA components in the terminal operations

The fact that proactive terminal operators have such an important role in Rail 11 to increase load factors is because increasing load factors hinges on the utilization of already existing resources in Rail 11. These resources are already in place and cannot be changed but any other activity, and, therefore, actors must relate to them and adapt to them. A major task is to match these resource structures to needs of other actors. An example of actors linked through the Rail 11 system, via a proactive terminal (*Innocenti*), is that of Swedish retailer *Ica* and Italian food producer *Barilla*.

In Rail 11, *ICA* and *Barilla* exemplify how this matching can be done. Among the customers to the terminals and freight forwarders in Italy the Swedish grocery-chain giant ICA is perhaps the one with the highest brand profile. For ICA being the largest grocery store chain in Sweden, Italy is a large supplier market as they have many suppliers based there. One of them is Barilla, a known producer of pasta, pasta sauces, noodles, bread and snacks with its headquarters in Parma. For *ICA*, SFL's northbound capacity which is determined, and already guaranteed by the paper mills, is a good match; and, as noted above, for the mills, each Euro that *ICA* and other importers in Sweden contributes with will make their southbound transportation cheaper. So, it is a win-win situation. But it is all dependent on the actors' capability of utilizing the existing resource infrastructure of Rail 11. This further show how any specific terminal operator have its already established connections to other actors which determines its operations, capabilities and restrictions. Designing a flow in Rail 11 means that all these already established resource structures and requirements must be catered to, otherwise the potential flow with its associated logistical activities will not come to pass. Again, we see how resources determines the activities and how this impacts on actor roles and functions in Rail 11.

DISCUSSION AND CONCLUSIONS

Our case and analysis show that when SFL organize flows in Rail 11, some resources determine much of the rest in the system. First, when a flow is designed in Rail 11 it cannot ever be in conflict with the pace of the paper machines orchestrating the southbound flow. Second, a flow in Rail 11 must be related to particular geographies. When a train operator needs a connection to a particular site, resources such as the geography of railroads, access to rail at a terminal, and the site of terminals with the equipment required, determines which actor(s) the operator should select for partnering. Third, any specific terminal operator has its already established connections to other actors which determines its operations, capabilities and restrictions. Designing a flow in Rail 11 means that all these already established resource structures and requirements must be catered to, otherwise the potential flow with its associated logistical activities will not be realized.

Currently, all flows and its associated logistics activities in Rail 11 are submitted to resource requirements in the south- and northbound flows as well as to current terminal operations. These flows have been enabled by collaborating with a fairly large and heterogeneous set of actors that can access certain resources and with creativity and proactive ways of solving logistical issues. Among these actors the terminal operators play an essential role in that they both provide a local detailed network of connections to other actors and resources which enables creative end cost-effective solutions for, for example, the last and first mile deliveries to various customers and shippers, as well as being important nodes in an already established network at the meso-level in terms of already being part of the Rail 11 infrastructure network. But other actors such as locomotive operators, rail operators and wagon rentals are also important. However, these actors become important only in light of a given set of activated resources and activities. In Rail 11 these resources and activities determines which actors to become emphasized.

This indicates a hierarchy among activities, resources and actors in Rail 11. Again, remembering that Rail 11 is inherently designed based on the needs of a particular set of actors (or even one major actor – BK) in the Swedish paper and pulp sector, taking this case as a point of departure informs us that resources have precedence over activities which in turn have precedence over actors when designing flows in Rail 11.

For firms such as SFL seeking to economize on existing resources (Rail 11), the location site of such resources limits the set of possible partners. As the case study shows, there are many examples in the transportation constellation where the set of possible terminal actors at a particular destination is limited to only one potential partner due to resource restrictions (site, equipment, railroad access, etc.). Thus, to economize on the network, and to have efficient actor bonds, available site-specific resources are the basis for the relationships to exist. In other words, this paper suggests that, at least in cases where resources are heavy and site-specific, a hierarchy of resource ties, actor bonds and activity links exist, presuming that available resources determine activities which in turn determines actors, rather than the opposite.

The implications are that although, in principle, resources, activities and actors are conceptually equal, in practice they are emphatically *not*. This means that when using the ARA model to analyze cases and empirical data, we need to specify the purpose of its use and from what angle we perform the analysis. In our case of Rail 11 – we specified the design of the system based on the needs and requirements of some actors of the Swedish paper and pulp sector as given. Given this angle, or set of assumptions, in this particular case, we could not just identify a set of relevant resources, activities and actors, but also detail the relationship between these in a more specific way. Recognizing the hierarchy among resources, activities and actors in Rail 11 enables us not only to describe the network, but also to explain why some things occur the way they do in the network and why some things are extremely hard to alter and achieve, etc. By specifying the purpose and perspective using the ARA model helps us take an analytical step that is otherwise impossible if we think that the ARA components have equal preference and importance also empirically. This points at the difference between principle and practice and how important it is that we are careful and conscious about how we link the two in our investigations of business network phenomena.

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