Networks

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The term 'network' goes back to a material object, the net or web. As a scholarly category in the natural and social sciences, but increasingly also in the humanities, networks are generally understood to refer to flexible, polycentric, and relational structures consisting of edges and nodes. The history of globalisation does not automatically require networks, and network histories deal with many other topics than globalisation. Yet the two have become a typical conceptual pair (Holton 2008). In the 1990s, only a few studies touching on globalisation had network in their title (e.g., Subrahmanyam 1996). Now, many titles every year mention the term (e.g., Jäger 2020).

Despite its ubiquity, the term 'network' is now sometimes listed among the problematic concepts in global history. Widely heard complaints have been raised against the 'overuse of the idea of the network' (Bell 2013; Gänger and Osterhammel 2024.). Given this tension, the time seems ripe for a critical reflection from a new vantage point. Examining how an approach focused on dis:connectivity (III) allows global networks to be studied from a fresh angle requires two preliminary reflections: (I) how the term 'network' has typically been used in histories of globalisation, and, more broadly even, (II) which general connotations the network metaphor (because it is a metaphor) has acquired over the last two centuries (Ahnert et al. 2020).

I

It is important to stress that histories of globalisation use network in quite different ways, not only with regard to strikingly different topics, but also in different terminological operations. On a first level, the term designates a specific *object*. The most important example is the history of technical infrastructures such as the railway (→ **Transport**) or the telegraph (→ **Communication Technologies**), for which network has been the accepted notion since the nineteenth century (Wenzlhuemer 2012; Van Laak 2018). Another example is the history of international organisations that brought together delegations from different countries or regions of the globe in polycentric structures explicitly called 'networks' already around 1900 (Herren 2009). These fields of research have received much renewed attention with the scholarly interest in globalisation in recent decades and there can be little doubt that network is an indispensable category for any scholar engaged in them.

In other studies on the history of globalisation, scholars follow *methods* of network research in the strict sense. For example, social network analysis (SNA) is a quantitative method from the social sciences that has become a massive interdis-

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ciplinary digital humanities phenomenon. It analyses and often visualises the relations between a larger number of persons, texts, or institutions, mostly based on an on/off rationale. Applications in globalisation research are various and concern the history of elites, businesses, science, or, again, internationalism (Grandjean and Van Leeuwen 2019). Another network method used in histories of globalisation is actor-network theory (ANT). This approach from science studies is based on the inductive and detailed description of actor-networks, which are typically considered to include both human and non-human actors (Latour 2005). The aim of this approach is a better understanding of complex settings of innovation and transformation shaped by heterogenous agents. In histories of globalisation, ANT has been used in research that ascribed an important role to materiality, science, or the environment (Gerstenberger and Glasman 2016).

The most widespread way to deal with networks in histories of globalisation, however, is to use network as a *metaphor*. It is the network metaphor (rather than the network object or network method) that is responsible for the magic rise of the term in global history, and it is also the metaphor that can be problematic. Focussing on all sorts of global networks, understood in an inclusive way, was of crucial importance to criticize and overcome methodological nationalism in the 1990s and 2000s. The term helped to identify all sorts of often loose and flexible structures that transcended the national container, in line with a whole series of movement-related or relational terms that arose in transnational history, such as 'circulation', 'flow', 'contact', or 'connection' (Gänger 2017). The network metaphor also possesses a specific capacity to transcend the distinction between small and large spaces, linking concrete empirical phenomena to the logic of globalisation. The network metaphor embedded local activities in structural patterns that could integrate very large spaces. Networks seem to be glocal (→ **Local-global-glocal**) by definition and lead towards global microhistories. This is why the metaphor has been of capital importance for a history of globalisation aspiring to be more than a history of the entire world or a comparative history of its large civilizations (Bayly 2004).

II

What is the problem with such a metaphorical use of 'network'? Unlike technical terms, metaphors bring scholarship into contact with everyday language. It is obvious that the network metaphor rose to prominence in scholarly descriptions of globalisation at a historical moment, the 1990s and 2000s, when the term came to be used with increasing frequency outside the academic world as well (Castells 1996). Complaints about connectivity jargon brought forward by historians in recent years hinted at its embeddedness in the globalisation euphoria of the post-cold war era (Gänger and Osterhammel 2020; Brewer 2021). Given the absence of

a clear distinction between an academic concept of network and its much broader use in everyday language, it is all the more important to understand better how the term 'network' was part of a longer history of globalism and connectivity thinking (Kuchenbuch 2023).

A first problematic aspect of the network metaphor is its historical relation to the civilising mission of European imperialism. Since the nineteenth century, 'network' has been employed to describe new technical infrastructures (→ **Infrastructure**) such as the telegraph or railways, which enabled the circulation of goods and information on a national, but also an imperial, or global level (Musso 2003). This nineteenth-century idea of networks, however, was not only descriptive, but also prescriptive: the construction of infrastructures was understood as an expression of a natural historical movement towards an ever-connecting world, led by European engineers and administrators (Gießmann 2014). This scenario, however, typically downplayed the violence and the hierarchies of Empire and assigned networks to the positive side of the imperial project. To this day, historians who study 'empire and globalisation' (Magee and Thompson 2010; Curless et al. 2016) struggle with this normative burden, and their emphatic histories of global networks have sometimes produced strangely optimistic histories of Empire. Big histories of the 'human web' (McNeill and McNeill 2003) hardly escape the same tendency of downplaying domination and exclusion.

A second burden of the network metaphor concerns its anthropological implications. Writing about past global networks often presents historical actors in a certain way by emphasising flexibility, creativity, and opportunity. This is no coincidence. The activity of forging social networks became an anthropological leitmotif above all from the 1970s onwards. The networking self defined in this period was considered to be mobile, creative, and always ready to connect (Boltanski and Chiapello 1999; August 2021). When historians use the term 'network', they often identify individuals in the past that more or less fit this image of the networking self. This has enabled them to tell the stories of the forgotten (anti-)heroes of globalisation, of go-betweens, brokers, and global lives (Schaffer et al. 2009; Ogborn 2008). At the same time, their perspective had a tendency to over-emphasize the opportunity and adventure that globalisation represented to individuals. Sometimes historians have used the network metaphor to imagine that globalisation brought increasing freedom for all when actually there was little, and often even less freedom for most.

III

In short, the term 'network' has been a vehicle of linear and unconsciously euphemistic interpretations of globalisation – not in the humanities primarily, but also there. Reflections about global dis:connections (→ **Introduction**) can be a useful

strategy to handle this problem while maintaining the significant advantages of a metaphorical use of the term 'network' in histories of globalisation. When absences (→ **Absences**), detours (→ **Detours**), and interruptions (→ **Interruptions**) are taken into account, problematic normative connotations can be avoided. An approach that takes dis:connections seriously, as I understand it, opposes a radical relational to a teleological and normative outlook on networks of globalisation; it brings conflicts and inequality back in; and it emphasises how ordinary people in the past were themselves exposed to the contradictions that were inherent in processes of globalisation (see Wenzlhuemer et al. 2023).

Networks of globalisation, analysed in this way, can no longer be understood as well-organised structures resulting from a natural evolutionary process towards greater integration. Instead, global networks could very well change their orientation, fade away or disappear completely rather than leading to ever greater integration. Different types of networks did not operate in a uniform manner, but rather interacted with each other in different ways, producing overlaps, tensions and fractions. The interwar period, to cite an example that has become almost canonical, has often been considered as a period when global trade networks established in the late nineteenth century disappeared, thus a period of deglobalisation (→ **Deglobalisation**). At the same time, new networks of international organisations were established, indicating a period of globalisation. Arguments about the bigger picture of globalisation certainly remain possible. But the narrative must be open and careful to avoid evolutionary stage models.

A dis:connective approach to networks can also be useful to push the metaphor against its own nature and to try to include hierarchies and power. Recent research, for example, has emphasised the structural inequalities that have always shaped networks of globalisation. Junctions in global networks presented themselves as obstacles to some, while they were practically invisible to others. Some had it in their power to decide with whom they did or did not want to connect, while their contacts were imposed on others against their will. An airport transit zone could be a node for some, while it was a dead end for others (Liebisch-Gümüş 2023). A dis:-connective approach, accordingly, acknowledges and indeed highlights a truism about networks: that usually some are in and others are out. More, it tries to locate the hierarchies in the networks themselves and studies how they operated in a world of networks that is everything but flat and egalitarian.

This emphasis on dis:connectivity should also allow scholars to take the often paradoxical interpretations of the historical actors more seriously rather than reading them in an anachronistic way as networking individuals. Both the discontinuous and the often inegalitarian nature of networks *was* experienced by historical actors and informed their own interpretations of globalisation. Migration, to cite another obvious example, was an experience of disconnection as well as of connection, and it

was the interplay of the two that defined the experience of migrants. Taking contemporary interpretations into account not only as sources but also as theoretical inspirations, rather than telling people retrospectively how global they actually should have been, provides less heroic or adventurous accounts of networks of globalisations, but more insights into ordinary experiences and their ambivalence.

IV

Metaphors are powerful instruments of research in the humanities, and it is difficult to do without them. When related to strong experiences in the present, however, they may have a problematic tendency to make themselves seem indispensable and indeed natural. This is certainly the case when it comes to 'network' (Schlechtriemen 2014; Friedrich 2015). A dis:connective approach is able to address some of the problems that come with the overuse of the metaphor of the network in histories of globalisation. Yet it remains difficult to strip it entirely of its problematic connotations. Hence the importance of being able to take a step back and consider one's terminological options. In addition to sharpening one's tools, dealing with problematic metaphors probably benefits from a more playful approach that helps to open up the debate for potential terminological alternatives.

Imagine there is no such thing as networks. Sometimes it can be more appropriate or more precise to use categories such as 'organisation', 'friendship', 'commerce', or another related term instead. And why not occasionally take inspiration from the historical terminology used at different historical moments and in different languages? Sometimes, it might even be necessary not only to switch between neighbouring terminological alternatives, but also between entire metaphorical paradigms. Thinking globalisation in terms of 'conquest' is very different than thinking it in 'networks'. Or think of other categories such as 'civilisation', 'capitalism', 'cosmopolis', or 'Gaia'. While such paradigms may overlap, they have different assets and downsides and tend to accentuate different gains and focus on different problems. In addition to refining one's technical apparatus, thus, it is useful to keep in mind that 'network' is never the only terminological option.

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