



Working Paper No. 1

OPEN-SOURCE INTELLIGENCE AS A SOCIAL CRAFT

A DEFINITION AND RESEARCH AGENDA

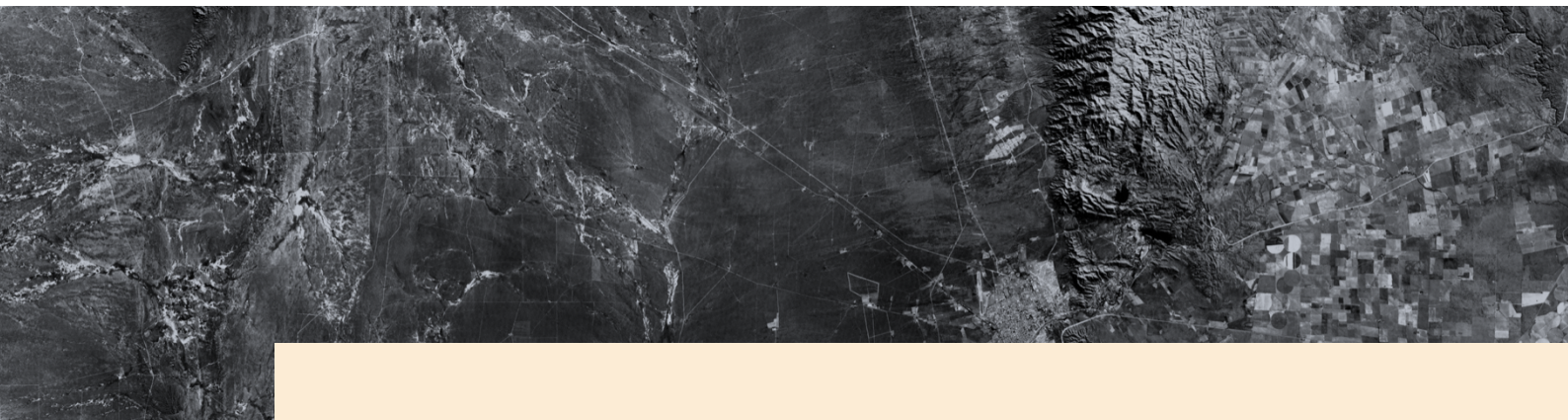
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Summary

To understand how open-source intelligence (OSINT) and its producers gain and maintain credibility amidst a booming field of investigations on war and human rights violations, the project VALOSINT proposes to move beyond dominant functionalist definitions of OSINT. Instead, it directs analytical attention toward the social practices through which open data is turned into valuable intelligence and through which professionals from different domains become legitimate open-source investigators. To this end, the working paper proposes to conceptualize OSINT as a distinct craft – a socially embedded, skilled practice that simultaneously constitutes a profession, a methodical science and a form of technological intervention. By attending to these three sociological dimensions of craftsmanship, VALOSINT offers a conceptual lens to study how, in an age of de-monopolized intelligence production in war and human rights contexts, accounts of truth are validated and contested. This conceptual lens is informed by social practice theory, which sheds light on the competences, meanings and material arrangements that sustain and legitimize OSINT work.





Introducing the FWF-Project VALOSINT

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AIM

VALOSINT employs a sociological framework and qualitative social science methods to study the social practices of groups and individuals performing OSINT in the context of war and human rights documentation. Based on semi-structured interviews and ethnographic observations, it aims to reconstruct how OSINT products and their producers attain credibility and authority in the field. To this end, it draws analytical attention to the multiple and sometimes competing ways in which social-symbolic, political and economic value is assigned to OSINT by its producers and users.

DEFINING OPEN-SOURCE INTELLIGENCE BEYOND ITS TECHNICALITIES

If the 1991 Gulf War can be classified as the first conflict broadcasted on live television, the Russian war on Ukraine has solidified the era of the ‘social media war’, where vast streams of user-generated data, satellite imagery, and digital footprints are publicly accessible in real time, allowing, in principle, any ordinary citizen to reconstruct pieces of intelligence (Asmolov, 2021; Fleischman, 2022; Kotišová & van der Velden, 2023). This de-monopolization of intelligence implies a highly fragmented information ecosystem (Rønn & Ördén, 2025). The contemporary landscape of human rights and conflict documentation is full of investigations bearing the label of OSINT, yet these outputs exhibit varying degrees of methodological quality and stem from a heterogeneous array of actors driven by divergent professional, commercial, or activist motivations (Hammerton, 2025).

An era defined by an explosion of information and the rise of new intelligence actors calls for new theoretical and conceptual approaches to explain how credible or ‘good’ OSINT is constructed and contested together with its producers as respective epistemic authorities. These approaches must attend to the question of how we distinguish OSINT from “random information on the internet”, as one of the interview partners in this project put it, and how we discern its producers from influencers, news outlets or partisan activism.

The dominant functionalist research paradigms fail to explain how credibility is established and maintained amidst such a cacophony of actors and voices. When we consider the existing definitional literature on OSINT, we find that, despite some variation, the definitions converge on a core set of criteria that are anchored in either institutional and technical markers of the method or the output of open-source investigations. This also holds true for the social science literature, as was recently illustrated by Puyvelde and Rienzi (2025) who focused on emerging debates and semantics in 25 key

publications in the field. Accordingly, a composite definition of OSINT includes three recurring qualities of data: its legality, publicness, and validation. In this way, OSINT can be defined “legally obtained public or commercial information that has been validated, analysed, and disseminated to meet an intelligence requirement” (Coulthart and Nussbaum, 2025, cited in: Puyvelde and Rienzi, 2025, p.532).

“Legally obtained” means that the data can be accessed without breaching any laws, typically via public repositories, platforms or through commercial providers. It is not obtained through undercover operations or hacking, albeit ethical hacking legislation is in place in some regions, and it remains contested how to deal with existing leaked data (Garg et al., 2025). The publicness criterion refers to the fact that the data is in principle accessible to anybody, even though it might not be free of charge (i.e. certain satellite imagery), and typically, the data was produced for particular non-intelligence related purposes. The third aspect, namely validation, analysis and dissemination, refers to a relatively comprehensive methodical processing and contextualization of different bits of information rather than, for example, sharing a mere photograph with a source. These knowledge outputs can be curated in the form of online threads, blog posts, reports, or even exhibition pieces.

Finally, the definition given above entails a fourth and perhaps more contested element, namely the “intelligence requirement” which often refers to knowledge gaps for policy decisions or, in the context of criminal prosecution, judicial decisions. Some would argue that this is what distinguishes OSINT from open-source evidence or open-source investigations (Hatfield, 2024). Yet, others have criticised a narrow institutional channelling of OSINT in conjunction with the development of widespread legalistic standards of evidence

such as the Berkeley Protocol as a “protocolisation” and “legal capture” of open-source investigations (Crawford-Holland et al., 2025). According to Crawford-Holland et al. (2025), this development is a sign of elitist gatekeeping, often rendering the interests and epistemological priorities of those affected by war and human rights violations secondary.

Evidently, academic engagement with OSINT has entered vital normative debates about the legitimate boundaries and purposes of open-source investigations that ultimately also reflect back on definitional debates. But while these debates raise important normative questions about analytical and institutional thresholds of OSINT work, they are not instructive for a deeper empirical engagement with the wider social conditions under which knowledge acquires the authoritative status of evidence. Echoing Gieryn's (1983) work on boundary-drawing in science, we can assume that demarcations of which actor and which knowledge are considered valuable, credible, or legitimate within the OSINT craft are never given. Instead, they are actively constructed, maintained, and negotiated.

Against this backdrop, VALOSINT proposes to introduce the thinking of International Political Sociology (Bigo, 2016) and what has recently emerged as Reflexive/Critical Intelligence Studies (Ben Jaffel & Larsson, 2022; Ben Jaffel & Larsson, 2024) to the field. This shift brings a new theoretical and analytical repertoire to the research area, as has been shown by a number of recent publications.

For example, Ben Jaffel and Larsson (2022) have proposed studying the social dynamics through which intelligence practice is creeping into previously uncharted domains, pointing to professional dispositions and habitus as binding forces of emerging transnational networks of intelligence workers. Hoffmann et al. (2023) have proposed informing our studies with the three sociological concepts of epistemic communities, transnational fields and knowledge circulation. And Leon-Reyes (2022) has argued for greater distance and reflexivity among researchers entering the professional field of intelligence by mobilizing the concept of the socially, disciplinary and scholastic unconscious. However, with the notable

exception of the contribution by Hoffman et al. (2023), very little of this theoretical, conceptual and methodological reorientation has trickled down into empirical research.

VALOSINT seeks to address this gap by advancing the empirical study of OSINT as a social craft.

THE CRAFT OF OSINT

In colloquial language, the term ‘craft’ is typically used to designate the activities of a diverse economy of small-scale enterprises that require highly specialized or even artisanal skills. Think of ceramists, glassblowers, or one might also add digital modelling and 3D-self-printing. The term often serves to distinguish forms of work that reject mass-market standardization in favour of individualized, skilful execution. Thus, doing craft means producing something of value, something that holds additional symbolic and culturally significant value compared to standard work; and it means evaluating this type of work in light of non-standard market parameters.

Clearly, one could think of many fields dedicated to cultural, academic, or for that matter, security production, where we find a collective disavowal of pure commercial interests and monetary profit. Instead, these areas are devoted to the accumulation of what Bourdieu called “symbolic capital”, typically manifested as prestige, honour and recognized authority (Jourdain, 2018). Symbolic value plays an important role in doing craft within these domains.

Aside from economics, craft has also been discussed in research on police work, for example (Willis & Mastrofski, 2018). In the context of street-level patrol work, it has been juxtaposed with more recent science-based patrolling paradigms, reflecting competing socio-cultural value systems that inform the good or legitimate practices of police officers. Here, craft is also understood as knowledge and skills that are very much locally anchored and acquired through daily experiences – something that cannot be replicated or generalized on a large scale.

Turning to the field of intelligence, Didier Bigo (2016) evoked the term craft in connection with what he calls “guilds of transnational security” to shed light on how communities of craft share specialized, often tacit knowledge and skills that create a sense of identity and solidarity among them. Even though his analytical attention is

more strongly dedicated to the concept of guilds, craft appears central to understanding how a set of socially significant practices can transvers national or professional identities of those who are carriers of these practices. It emphasises that there is a sociological and symbolic dimension undergirding the technical and methodical process of assembling and verifying security-related data.

No matter if it is used in juxtaposition with the concept of work or science, the term craft has served to open up conversations about sociological aspects of activities and the heterogeneity of value orders at play in different realms of social life. When certain social practices transvers dominant understandings of the legitimate way of doing things, the carriers of these practices also assign social-symbolic, political, and economic value differently. These considerations are particularly instructive in developing new analytical angles for areas where the boundaries of a field are not yet firmly established and the ‘right ways of doing things’ are contested among members of different professions. Here, it is particularly important to grasp the multiple socio-political dimensions of a craft and how they reflect different ways of assigning worth to an activity.

Seeing craft through a social practice lens

For the study of open-source intelligence work, VALOSINT proposes to theorize the inherent craft in terms of social practice theory (Shove et al., 2012). The concept of craft is closely linked to that of competences featured as one of three elements of Elizabeth Shove’s (2012) theoretical account of social practices (Shove et al., 2012). Social practices are defined as everyday doings and sayings that are constituted in a certain time and space through a) material environments, b) meanings and c) competences. Competences encompass skills, know-how and techniques, but they are always interlinked with technological objects and infrastructures (materials) enabling or constraining their performance, as well as meanings, that is, shared symbolic systems of ideas, norms and values shaping what is considered meaningful and legitimate and how human actions are interpreted. VALOSINT

combines this theorization of craft with a valuographic analytical focus (see upcoming Working Paper) on valuation and evaluation (Boltanski et al., 2006; Dussage et al., 2015). This means that by talking to OSINT practitioners about their skills, tools as well as the norms and rules governing their day-to-day business, it seeks to understand the multiple ways in which they assign value to their practices, co-producing a legitimate craft and authoritative knowledge claims.

The analytical puzzle then is not merely how digital tools operate on open data, but how a new set of competences for producing knowledge emerges, and how the carriers of this craft successfully attain epistemic authority.

The ways in which OSINT practitioners deploy certain skills, certain types of institutional and sector-specific knowledge, and certain software tools distinguish them from both online information outlets/influencers and traditional intelligence actors. This positions them as carriers of a valuable truth-telling practice of their own kind.

Thereby, VALOSINT assumes three domains of valuation and evaluation to be particularly important. In order to become epistemically authoritative, OSINT and the carriers of its craft have to emerge as valuable in (I) a professional sense, (II) a scientific sense and (III) a political sense.

SOCIOLOGICAL DIMENSIONS OF THE OSINT CRAFT

I. Professional dimension

The first dimension treats OSINT as a craft embedded within evolving professional fields and changing structures of labor division. This perspective goes back to Andrew Abbott's (1988) view that professional authority emerges through jurisdictional claims over expert work within evolving systems of professions. Performing a craft means being able to insert a set of skills into a specific professional environment that follow particular norms of authority, division of labor and compensation. Today, we might observe distinct professional trajectories within journalism, legal advocacy, and academia that make individual actors see added value in producing OSINT. Doing OSINT may resonate in a similar fashion with a person engaged in investigative journalism, someone searching for new forms of evidence for criminal prosecution, or a scholar aiming to conduct activist research. But entering the field may involve navigating specific structures of labor

such as the precarity of grant-funded NGO work and a lack of institutional backing for this work. OSINT gains legitimacy as practitioners negotiate recognition across journalism, law, academia, and civil society, while navigating changing divisions of labor and institutional support.

Within the professional dimension of the craft, a valuographic lens asks what engaging in the OSINT craft means as a vehicle of value production within practitioners' career trajectories, biographical choices, and changing structures of labor division. It focuses on narratives of legitimation, namely the retrospective justifications practitioners deploy to explain why entering the OSINT field was a necessary, correct, or morally superior biographical step. Furthermore, it attends to certifications and compensation mechanisms, that is value attributions, monetary and otherwise, that enable and sustain OSINT work in specific social and institutional contexts.

II. Scientific dimension

The second dimension captures the methodical dimension of the craft, focusing directly on OSINT as a data-scientific practice. Here, the emphasis is on the actual rules and conventions governing the process through which intelligence is assembled via open data and various toolkits. Going back to Knorr Cetina's (1999) concept of epistemic cultures, which conceives scientific authority as emerging from shared practices, instruments, and norms of knowledge production, I assume that performing a craft also means knowing and following situated evaluative frameworks that give legitimacy to knowledge or truth-claims. Furthermore, the craftsperson's relationship to their tools is central. The OSINT practitioner possesses specialized knowledge of the conflict in question, its digital environments, and the appropriate tools at hand to reconstruct what happened at a given moment and to understand their limitations.

From a valuographic perspective, the scientific dimension attends to the evaluation practices through which messy (and frequently manipulated) open-source data is systematically transformed into verified, high-quality knowledge. It is interested in when OSINT is good enough for particular institutional purposes and how evaluative frameworks of producers and users clash in this process. For example, courts typically have rigid standards of legal admissibility, which might go beyond aspects of pure scientific rigor. Besides that, there could be local conventions and informal knowledge concerning evaluative practices that are not mirrored in prominent frameworks like the Berkeley Protocol for instance.

CONCLUSION

By shifting the analytical focus from narrow, technical definitions of open-source intelligence to a sociologically grounded conceptualization of OSINT as a craft, I have proposed a novel

III. Technopolitical dimension

The final dimension addresses the knowledge-power nexus of OSINT and is rooted in Jasanoff's (2004) concept of co-production, according to which knowledge and political order are mutually constituted. In highly contested human rights and violent conflict contexts, the production of knowledge and deployment of technical expertise are never agnostic acts; they are a political intervention in the field of power and value orders. By using open-source data to document atrocities for example, OSINT practitioners perform a political move that may challenge official state narratives and other authoritative knowledge claims advanced by different parties involved in a conflict. Politics comes into play not only when choosing who to cooperate with, but also in the selection of investigative cases and the choice of tools and outlets for publication. In this sense, performing a craft means having knowledge of the political terrain and navigating it in ways that render OSINT findings consequential (i.e. for international legal and political institutions) without compromising their scientific integrity.

Within the technopolitical dimension, valuography implies a focus on the public political value of OSINT and how actors carrying this craft navigate issues such as independence vs state-cooperation, public value vs individual risks, as well as how and with whom they solidarize with in concrete geopolitical settings. These issues run throughout the work of OSINT practitioners, starting from the choice of investigation cases, to the commitment to ethical principles throughout their work, all the way to what they do with the outcomes of their investigations.

framework for studying the new decentralized forms of producing evidence or intelligence. Through the three dimensions of craft, namely craft as a professional labor, craft as a data-scientific practice, and craft as technopolitical

intervention, the latent value orders, social relations and institutional struggles that underpin OSINT work are rendered visible.

Deploying a valuographic methodology allows empirical research to move beyond what practitioners merely state as abstract values. Instead, through qualitative interviews and ethnographic engagement with those producing and using OSINT, social science scholarship can reconstruct the social practices through which actors negotiate competing values in their search for and evaluation of credibility and epistemic authority. In an era defined by an explosion of information and the demopolization of intelligence, this framework provides the social sciences with a conceptual and analytical toolkit to explain how “good” OSINT and its corresponding epistemic authority are constructed and contested.

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