

**Themed issue: New historical perspectives on ‘off-grid’ techniques (Vol. 2):  
‘Off-grid’ techniques and network/off-grid dichotomy (18th-20th centuries) in  
France and in international perspective**

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The network occupies a central place in the history of technology. This is easily explained since an essential part of modernization in the rich world has, in fact, been based on the construction of large technical networks providing water, energy, information and ensuring hygiene, mobility of people and goods and remote communications. Reflecting this de facto domination, placing itself in some way from the ‘winners’ point of view, the historiography of daily life services has generally endeavored to account for the historical development of large technical networks and has tended to study ‘off-grid’ techniques only in a negative way, so to speak.

*History of ‘alternative’ techniques to networks / Alternative history of network techniques.* Extending a first themed issue published in issue 131\* of the journal, the aim of this new issue is to take a step aside from this dominant historiography and to contribute to a renewal of the history of ‘off-grid’ techniques. To this end, we wish to bring together contributions that analyze these techniques not from the perspective of the dominant network model, but as *normal*, central, essential and lasting elements of the “material constitution of our societies” (Edgerton, 2012), whether these societies are rich or poor. In addition to their intrinsic contribution, we are convinced that these historical studies of ‘alternative’ techniques to networks also contribute to an alternative history of said networks. More fundamentally, we encourage contributions questioning the dichotomy between network and ‘off-grid’ techniques in light of their more or less persistent interdependencies on the technical, territorial and imaginary levels. The studies brought together in the previous issue, like numerous works relating to contemporary urban contexts\*\*, highlight the multiple and often lasting forms of complementarity or hybridization at work in socio-technical systems providing essential services.

*Diversity of forms of “off-grid”.* This themed issue would therefore like to include articles on techniques relatively neglected in the historiography but which nevertheless played a key role in the provision of such essential services. In the energy field, we can think, for example, of the stearic candle, kerosene lamps, acetylene stations for welding, or even bottled gas. Contributions may also address the multiple ways of producing off-grid electricity in the 20th century – using wind turbines or small hydropower. We can also look at the techniques, no less numerous, based on the effective mobilization of human or animal power: cranks, hand pumps, pedals, etc. Contributions relating to other techniques could obviously be proposed, whether they concern the field of drinking water supply, the treatment or reuse of waste water, the collection or evacuation of rainwater,

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\* Voir the introduction to this themed issue (in English) at:  
<https://www.cairn.info/revue-flux-2023-1-page-1.htm>

\*\* See in particular the themed issues published in *Flux*, issues 56-57 (2004), 76-77 (2009), 87 (2012) and 105 (2016).

treatment of waste, their reuse, their recycling or their recovery – or moreover several of these areas.

*Materialities, metabolisms.* The file would particularly like to emphasize the measurement of the metabolic importance – the material weight – of these techniques. In fact, the latter sometimes reappear, in modern forms, where you least expect them. For example, kerosene lamps have disappeared from the rich world - their use remains important elsewhere - but the headlights of automobiles in circulation alone consume more oil today than the entire world in 1900 (Fressoz, 2024). Another way of questioning the material reality of the two modes would be to historicize the discourses which oppose the ‘malleability’ and flexibility of the off-grid to the massiveness of large infrastructures. Since the beginning of the 19th century, have there been ‘alternative’ imaginaries that see the off-grid as an innovation in the sense of metabolic simplification (Simondon, 1958)? If they exist, what are their influences on the inertia of (non-) centralized energy systems and on the dependence of the future of the (non-) networked techniques on their past trajectory (*path dependency*)?

*Politics and ideology of (off) grid techniques.* The themed issue will also endeavor to move away from narratives sometimes imbued with ideological presuppositions on the political ‘nature’ of this or that technique, in particular narratives associating large networks to centralizing or even authoritarian forms of power, in contrast with allegedly convivial and democratic off-grid techniques. In the 1970s, the defenders of off-grid techniques were certainly part of the movement of appropriate technologies, low tech, etc. But others linked the disconnect to an individualistic, neoliberal view of ‘good’ technological development. The network, in that it allows the universal provision of a certain number of essential services, can quite be read as a sociotechnical form more democratic than ‘decentralized’ techniques; indeed, the argument was repeatedly made by socialist movements in the years 1900. It appears relevant, therefore, to return to the anti-network discourses, even actions (sabotage, etc.) which have accompanied the development of networks since their appearance in the mid-19th century.

*Overcoming the dichotomy between on-grid and off-grid.* Finally, more broadly, contributions may discuss the limits of the opposition/dichotomy between network and non-network techniques, paying particular attention to the more or less lasting forms of complementarity, hybridization or dependence between each other (a generator, for example, depends for its use on oil logistics networks).

*Coevolution between social practices and material environment.* On all of the themes listed in this call for articles, an approach through the practices of daily life, focusing in particular on the way in which social practices and the material environment (re)produce and transform each other, could be enlightening. In what ways do on-grid and off-grid technical practices and reconfigurations influence each other? How does this focus shed light on the evolution of technical systems over the long term?

The expected contributions must be based on a historical approach, attentive to the configurations having prevailed in the past, to the long duration of the transformations of the techniques and associated systems under study, to the links between past, present and future, even to the underlying regimes of historicity. A first discussion of the various “uses” of history to think about techniques on and off the grid is offered in the introduction to the already cited *Flux* special issue (Coutard, Bothereau and Tarr, 2023).

Contribution proposals can relate to all regions of the globe, to techniques operating in various spaces, those of production as well as those of consumption, from the domestic space to urban, regional, national and international scales. Case studies outside France, inter- or transnational comparisons, the international circulation of techniques (and associated practices, discourses and imaginations) are very welcome.

### *Deadlines*

- Call circulation: February 2024
- Submission of first drafts to the journal: September 15, 2025
- Reviews sent to authors: December 15, 2025
- Submission of revised drafts: April 30, 2026
- Submission of final versions: September 30, 2026
- Published: December 15, 2026

This extended timetable — in particular before the submission of the first version of the proposal (19 months) — aims to allow additional investigations to be carried out, if needed, before submitting an article proposal.

Colleagues who wish to ensure that their proposed contribution fits well into the themed issue can send the coordinators a declaration of intent, in the form of a summary of the proposed contribution, and ask for feedback.

Article proposals will be evaluated as they are submitted; accepted articles will be posted online as they are accepted, after formatting in the journal's format.

Plus d'informations sur la revue *Flux* <http://www.cairn.info/revue-flux.htm> et le guide pour les auteurs : <https://www.cairn.info/revue-flux.htm?contenu=apropos>

### **Cited references**

Coutard, Olivier, Bothereau, Benjamin et Tarr, Joel A. (2023) “History (and stories) of off-grid technologies: a reappraisal”, *Flux*, 131, p. 1-14. <https://www.cairn.info/revue-flux-2023-1-page-1.htm>

Edgerton, David (2013 [2006]) *Quoi de neuf ? Du rôle des techniques dans l'histoire globale*, Paris : Le Seuil (coll. L'univers historique).

Fressoiz, Jean-Baptiste (2024) *Sans transition. Une nouvelle histoire de l'énergie*, Paris : Le Seuil (coll. Ecocène).

Simondon, Georges (1958) *Du mode d'existence des objets techniques*, Paris: Aubier.