7. *Infopoetry / Infopoesia*. Data Visualisation between Design Method and Artistic Expression: an Experimentation

Salvatore Zingale, Arianna Bellantuono
Department of Design, Politecnico di Milano

7.1 Starting from Complexity

Infopoetry is an atypical form of data visualisation, experimented as part of the DensityDesign Lab of the Master's Degree course in *Communication Design* from the 2013-2014 academic year. The studio lab, which has been active since 2004 and was initially conducted by Paolo Ciuccarelli, has as its founding theme the ways in which data visualisation can take place and, consequently, the forms in which these tell and make visible and comprehensible various contemporary phenomena and problems (cf. Valsecchi *et al*., 2010; Mauri *et al*., 2019; Ciuccarelli, 2024b). Over these years, it has provided generations of students with the tools and languages of information design and, in general, of representation seen as a process (Zingale, 2016). As stated in the report presented at the 2019 *Learn X Design Conferences DRS*, in addition to the objective of training competent information design professionals, the lab «aims to stimulate reflection on a designer's role in the information society. The overarching goal is to encourage students' critical approach to data, opening up reflection, through practice, about the

criticalities related to the visual communication of data and informa-tion» (Mauri *et al*., 2019, p. 12).

With a reference to the *Visual Education* classics of Isotype (Neur-ath, 1931) and cartography (Bertin, 1967), and drawing on contribu-tions from statistics and semiotics, the *DensityDesign* workshop ex-plored the emerging relationships between communication design, information visualisation and complex systems. Indeed, profoundly influenced by complexity theory (Morin, 1990; Bocchi & Ceruti, 1995), the course originally focused on the creation of visual artefacts seen as generative devices, to later move towards themes of social com-plexity, with reference to Actor-Network Theory and Controversy Mapping (Venturini, 2010).

In 2010, DensityDesign Lab 1↘ was also constituted as a re-search laboratory at the Department of Design at Politecnico di Milano, achieving international visibility and collaborating with enti-ties external to Politecnico and with other universities. Thus bringing data management and visualisation entirely within the discipline of design (Ciuccarelli, 2024b), the visualisation of complexity addresses the tasks of comprehensibility and accessibility, user-centredness, and thus communicational and cognitive management (cf. Valsecchi *et al*., 2010). This requires from the designer the pragmatic skill of me-ta-representation: the ability, in our case, to also think with the other's thoughts, i.e., the expectations and limitations of readers and users (Sperber & Wilson, 1986-1995). In this sense, visualisation and its re-lated interfaces act as cognitive mediators.

Then, considering the increasing availability of data on the web, the lab's sources, methods, and tools were gradually reformulated, taking a cue from *issue mapping* practices (Marres, 2015). As can be read in one of the first scientific articles by the lab's research team, «the com-munication artifacts that we intend to design cannot be considered as the solution to a ongoing wicked problem; mostly they are cognitive tools, that help to better (or thicker) understanding in order to better acting, taking into account both by conserving than visualizing, also uncertainty and unpredictability» (Valsecchi *et al*., 2010, p. 182).

In 2024, an executive course with lectures and workshops was held at the POLI.design Consortium: *Data visualisation. The visual narration of information*.

7.2 Infopoetry: The Reasons behind a Neologism

The reference to complexity inevitably also leads to the need to concern ourselves with the representation of uncertainty and unpredictability, as well as *fazzy* concepts. In addition to this, a double need has increasingly emerged over the years: on the one hand, to introduce a greater communicative charge into the visualisation (Ciuccarelli, 2024b); on the other hand, to involve the designer's point of view in the treatment of data. Hence, favoured by a fortuitous event 2↘, the idea gradually took shape of engaging students in an exercise that would test their imaginative and expressive, as well as technological, skills.

Note 2.
The neologism was born with an entirely different purpose from a tweet by Borsacchi Matteo in January 2013, in which the hashtag #infopoesie referred to the infographics of the DensityDesign Research Lab published in the weekly magazine *La Lettura*. It was thus immediately adopted by Paolo Ciuccarelli and the faculty members of the lab.

The atypical aspect of infopoetry is thus shown in the results it achieves: artefacts that *visualise* – but it would be more appropriate to say *translate* – the set of source data into posters, videos, web interactions, books, objects, and audio that lie between the methodology of design and artistic expression. Among the media used are also paintings and sculptures; even carpets and clothes. On the DensityDesign website page dedicated to infopoetry 3↘, you can view the different infopoems from 2013 onwards.

Note 3.
Link→

As can be easily guessed, the term is a neologism formed on the cast of *infographics*. One of the most concise ways to get across what it is about is to resort to an aphorism: infographics aim to make people *see* data, infopoetry to make them *feel*. The aphorism, however, also requires an explanation: in order to be able to speak of *infopoetry*, it is necessary that the final artefact contains both a connection to the collected and selected data (*info-*) and an expressive configuration that deviates from the usual design mode (*-poetry*).

The purpose of infopoetry is therefore dual: on the one hand, it requires students to start from their own interpretations of the data, their own communicative intentions, and their own subjectivity; on the other hand, it has the task of reaching out to the readers' sensibilities and thus bringing them closer to what the data represent (Zingale, 2020). But let us see how and in what context the idea of this project

practice was born and what theoretical implications it has. Unlike the main activity of the laboratory, which involves the division into groups, infopoetry was conceived as an individual exercise, with the aim of allowing each student to express their skills and visions more independently. The space of choice left to the students also concerns the content to be addressed.

As in the development of group work, especially in infopoetry, visualisation of any complex system is fundamental: visualising means making visible what is latent in the system. And here the ineradicable theme of interpretation comes into play: visualising means interpreting. But to which purpose? As we will explain in more detail, in fact, it drives the designer to make explicit their stance on the subject in question, involving the sphere of subjectivity and emotionality.

This was the first requirement from which the idea of this type of exercise took its cue. As Paolo Ciuccarelli observes, infopoetry stems from:

> **the observation of the profound impact of technological skills in shaping students' understanding of data (and design): as their expertise grows, there's a tendency to zero in on data manipulation techniques, losing sight of the larger design frame they should be adopting. Seduced by the allure and the potentialities of data visualization tools and libraries, they might neglect considerations about the user, the context and ultimately the consequences and the impact of those data transformations. Infopoetry emerged as a means to counterbalance that phenomenon, introducing friction to cultivate a critical stance, by triggering a deeper reflection, and situating technological proficiency within the wider scope of design-driven innovation. (Ciuccarelli, 2024a, p. 7)**

7.3 A Semiotic Approach

In addition to the one summarised by Ciuccarelli, there is a second reason that prompted the teaching team to give more and more space to this exercise: the encounter between semiotic and design processes. The infopoetry exercise has in fact gradually made it possible to experiment how semiotics can also be employed as a normative science, i.e.,

aimed at identifying what could be through theoretical contributions designed to achieve certain objectives. From this point of view, this exercise constitutes one of the project experiences in which it is possible to prove how semiotics is able to nurture the project enterprise. In fact, the production of infopoetry involves the conversion into praxis of certain concepts proper to semiotic theory that lie, as it were, on the axis from interpretation to visualisation.

The following six points, which are part of what we called preparation form, are proposed to the students as a guide to the design of their own idea, which takes shape dialogically during the mid-term reviews with the lecturers.

7.3.1 Interpretation

Every semiotic activity is in itself interpretative. However, here by the term *interpretation* we mean a double gaze of the designer. On the one hand, the analysis and critical understanding of the chosen dataset and the social and cultural issues of which it is the result; on the other, the interpretation becomes the way in which the artefact to be designed can be said *to interpreting* the dataset. This *forward interpretation* will constitute the design path and presupposes that the designer acts according to an abductive logic and, therefore, according to a series of inventive acts (Zingale, 2012).

7.3.2 Textualisation

Textualisation is a consequence of the chosen topic and the dataset representing it. It is the organisation into a form of semiotic textualisation of data from even a variety of scattered sources. In the semiotic sciences, the term *text* is understood as any cultural organism produced in order to be the bearer of a sense and meaning and which presents a semantic coherence: a *fabric of signs*, to take up the origin of the term, which often manifests itself in an artefact such as a book, a painting, a building, a performance, etc. (Pozzato, 2001; Marrone, 2011). But to be *textualised* can also be parts of social and cultural reality, such as behaviour, a set of problematic facts, ways of using spaces and objects, forms of ritual, and more. One's own experience with digital devices can also become the object of textualisation (see § 4.). In addition to having an expression that refers to a meaning, a text

must have clear boundaries. These can be defined either by an authorial entity (for texts that an observer finds already defined as such) or by the observer who has an interest in the study of a certain social practice. In the case of infopoetry, this is the text that is of interest, which we can refer to as the *collected text* – to which we can oppose the *authorial text* – because it derives from what the operator searches for, observes, and thus selects. The definition of limits thus distinguishes what is to be considered as text from everything that does not belong to it.

7.3.3 Relevance

The work of textualisation leads us towards another issue studied by semiotics, which fully enters into the design methodology. We refer to the concept of *relevance*, which we adopt here in particular from Luis Prieto (1977). According to the Argentinean scholar, «the identity under which an object is known depends on the point of view one adopts to consider it, so that, consequently, the pertinence of a classification system [...] can only be explained [...] by the point of view from which one considers the objects in question» (Prieto, 1975, p. 86).

This means that no dataset encountered can be considered in its totality and for every content it involves, but its signifying value is only defined from the moment a subject's point of view highlights one or more of its relevances; in our case, the relevances delineate the reason why a dataset is chosen.

The definition of the relevance of the dataset thus implies – even implicitly – the presence of the designer's communicative intention, the desire to highlight particular aspects of the dataset or to bring to light its shadowed and ignored aspects. The work on relevance thus aims to make visible what an *obvious* view does not see.

The notion of relevance, as is well known, has also taken on another significance in communication theories, the one highlighted by Dan Sperber and Deirdre Wilson (1986, 1995), also known as *Relevance Theory*. In this case, the object of study is the levels of cooperation and meta-representation between two interlocutors.

This cooperation concerns in particular the inferential activity of the receiver in any kind of communicative exchange, i.e., their cognitive work of understanding. This is either fostered through the production

of *cognitive effects*, leading to *interpretative well-being*, or under-mined by the *cognitive efforts* required to process the information of a communicative act.

This aspect, again, makes it possible to return to the double gaze of design work: on the one hand, relevance concerns what the design-er decides *to see* and *consider* within a dataset; on the other hand, it becomes an interpretative offer addressed to the user, who will be as much able to understand the meaning of an infopoem as they will be able to grasp the implicit design intentions in the artefact.

7.3.4 Translation

Translation is one of the topics that the very experimentation of in-fopoetry has helped to highlight. Starting from the assumption that every design action involves a path of (Zingale, 2016; Baule & Caratti, 2017), in infopoetry, is the transition from the *nebula* of the dataset – because every data collection is fragmentary and vague – to its re-definition into an infopoetic artefact. It is evident that, in this case, the type of does not follow the three types of defined by Roman Jakobson (1959): *intralinguistic* or reformulation, *interlinguistic* or true , and *in-tersemiotic* or transmutation. In this case, is a real shift from a stand-ard form of communication to a radical reinvention.

But it is precisely in this radicality that the educational potential of infopoetry manifests itself: prompting students to explore previously unseen connections of meaning, previously unknown associations of ideas, to the point of discovering how far an ordinary image can expand the spectrum of the meaning of things.

7.3.5 Metaphor

Here again another classic concept of the language sciences is in-volved, the metaphor. In our case, two aspects of metaphor are privi-leged: its being inevitably an *image* and its cognitive character, a gate-way leading to new possible knowledge (Lorusso, 2005).

Not, therefore, as a figure of speech embellishment but as a figure that aims to make otherwise inexpressible concepts visible. In fact, the request to identify a metaphor – or in any case, a strongly evocative image – as the *place of representation* of the dataset often reserves surprises. It is a question of working on the expressive force of an image, capable

at the same time (i) of interpreting the content considered relevant in the dataset (see 2.3.) and (ii) of stimulating the user's imagination.

7.3.6 Sense Effect

A final aspect of the work on relevance thus concerns the strategies for infopoetry to present itself with all its communicative potential, which places it on the borderline between design and art. In this direction, one proceeds in view of the construction of the *sense effect* one intends to provoke in the mind of the user, as Edgar Allan Poe already recommended in *The Philosophy of Composition* (1846).

This sense effect – emotional or cognitive – is likely to be efficient depending on the degree of inventiveness of the metaphor identified to translate the contents of the dataset into the infopoetry.

We can therefore conclude by saying that each infopoem contains as it does an implicit request, which we can formulate as follows: *in this artefact I am showing you the data relating to a certain phenomenon; but in addition to the denotation of the data, I am asking you to pay attention to the possible evocations that derive from the way they are presented*.

7.4 Themes Addressed

In many respects, experimenting with infopoetry is a *content project* and often also requires social and cultural criticism. This is also evident when considering the topics chosen independently by the students from year to year. In several cases, infopoetry is an act of information and clarification. Like, for example, the infopoem *Confini* 4↘ by Alessandro Riva, which shows the kilometres of walls that have not been freely accessible built since the fall of the Berlin Wall in 1989: the quantity is impressive, not least because this data is not the subject of information in official channels.

Over the course of these ten years, the themes that the studio laboratory has discussed have gradually adapted both to the technical and critical evolution of the students as well as to the social and political context, in order to bring them closer and closer to designing in the context of a complex world.
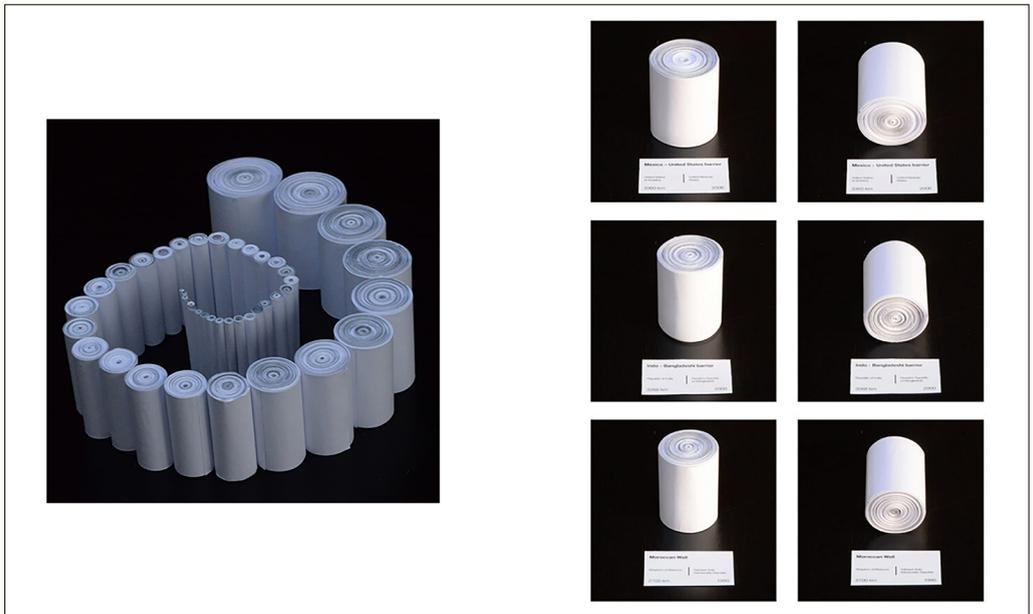
Initially, the themes dealt with by the students concerned social and cultural realities that, from the designer's point of view, needed to be explored, narrated and uncovered. Below is a default list of some of the most recurring themes throughout the years:

- culture and literacy (reading, cultural consumption, heritage, etc.);
- problematic behaviour (food and clothing waste, illiteracy, leisure, etc.);
- nutrition (food maps, value of food, treatment of animals, malnutrition, etc.);
- health (sedentariness, screen exposure or insomnia, HIV, smoking, insomnia, etc.);
- human rights (migration, violent or terrorist events, prison conditions, work, etc.);
- science (falling stars, pollution in space, digital connections, etc.);
- ecology (melting glaciers, deforestation, pollution, drought, etc.);
- social problems (war investments, population decrease, gender violence, etc.);
- transport (delays, connections, plane crashes, etc.).

All the topics just mentioned concern the representation of open and public data, the extraction of which comes from Open Data portals, national and international statistics, and data collected by activists.

There were also some activities to disseminate the results of the first five years of activity — in particular: a presentation by Paolo Ciuccarelli at the Eyeo Festival 2016 5↘ — including an exhibition in 2018 of some videos at the Wild Mazzini gallery in Turin 6↘ and two workshops at ISIA in Florence, the first in 2018, the second on the topics of the Covid pandemic and the war in Ukraine in 2022 7↘.

7.5 Towards a Re-appropriation of Data

In the last two academic years (2022-2023 and 2023-2024), the faculty proposed a common theme to the students, which was given the title *Algorithmic You* (Benedetti *et al*., 2024). It was proposed that they work on data from each other's digital channels, such as social media (Instagram, TikTok, or Facebook), or statistics from their own digital devices, thus exploring their personal relationship with technology.

This added a further methodological practice to infopoetry that we can call *autoethnography*, which is implemented by the designer when the object of his or her investigation is their own experience. Also in these two editions, despite the common theme, the results developed were extremely varied. In fact, topics such as: movements, interpersonal communications, autobiographies, repetitive gestures, pathologies in the use of social networks, fears and insecurities related to the social context, family histories, interests, and even aspects of one's own intimacy were explored. All this was also addressed with self-criticism, playfulness, and irony. The result is a reflection on the abuse of social networks and the *parallel life* that takes place in the digital world; a result that we presented in an exhibition at the Library of the Technische Universität Darmstadt in spring 2024 8↘. The exhibition in Darmstadt 1↘ allowed us to focus attention on a further function of infopoetry, seen in this case as an act of re-appropriation of the data that each of us leaves behind in the digital sphere. Data are indeed traces that we leave behind

us, often without realising it. Like the physical ones, they are part of our daily experience. They are the marks of what we do: our words, our thoughts, our desires, our social relationships (Manchia, 2020).

However, these are traces that we overlook, but which are collected by others; traces that others exploit for their own benefit. Why let others collect them for their own profit? How can we counter, *poetically*, this new form of expropriation?

In this sense, the two editions of *Algorithmic You* 9↘ are also an act of criticism of the power of algorithms: an act of re-appropriation.

What is taken from us for commercial purposes or social control becomes a critical practice; what was just a number becomes poetry. It becomes the material for a poetic and liberating exercise 10↘.

7.6 From Design to Art and Back Again

As mentioned above, it is precisely the expressive-evocative level that differentiates infopoetry from infographics because it expands the aesthetic dimension of the visualisation.

Over the years, a curious circumstance has thus been noted: often, more or less unconsciously, the final solutions of infopoem present references to artistic forms from the neo-avant-garde of the 1960s-1970s, as if such forms or procedures belonged to a common visual culture, deposited in our cultural encyclopaedia 11↘. For example, Paz Del Zotto's infopoetry *Jumbo love Replaying Beaucoup Fish* 12↘ is a magnified reproduction of the Underworld group's CD. The resulting *soft sculpture* seems to be inspired by several works by Claes Oldenburg (e.g., the *Soft Typewriter* from 1963), although in our case the size and weight

Figure 2.
Paz Del Zotto, *Jumbo love Replaying Beaucoup Fish*, 2024.

translate listening time into a metaphor to physically represent a habit implemented in the digital world: «the object's liquid or weak appearance is meant to represent the thoughtlessness with which time is spent when listening to music through streaming media services», reads the presentation text.

Another surprising assonance is when students make use of textiles and tapestries, in particular Bianca Bauer's infopoetry *Tapestry of Assumptions* 13↘, which recalls the works of Alighiero Boetti. There are also several cases of the revival of Visual Poetry, with books in which texts tend to disappear (*Unwritten* 14↘ by Simone Castagnola, *The silent Extinction* 15↘ by Alessia Bissolotti), or acquire materiality (*Crumpled Italia* 16↘ by Carola Barnaba) or even present typographical compositions very close to Concrete Poetry.

Sometimes, this reference is explicitly mentioned. Silvia Casavola, for instance, in the infopoemary *Human Face* 17↘ developed a particular *literary experiment* in order to investigate, through the use of algorithmic processes, the concept of digital identity. In this design, the *image-to-text* process of Instagram was used, which replaces present images with words. The latter appear almost decontextualised and *scattered* across the page, visually referencing the experimental literary movements of the 1950s-1970s (Accame, 1977, 1981).

Other instances of references to figures and stylistic features of the neo-avant-garde (especially Conceptual art) are left to the reader's recognition game.

Note 12.
Link→

Note 13.
Link→

Note 14.
Link→

Note 15.
Link→

Note 16.
Link→

Note 17.
Link→

Figure 3.
Bianca Bauer, *Tapestry of Assumptions*, 2024.

Figure 4.
a. Castagnola, *Unwritten*, 2017. Detail.
b. Bissolotti, *The silent Extinction*, 2017. Detail.
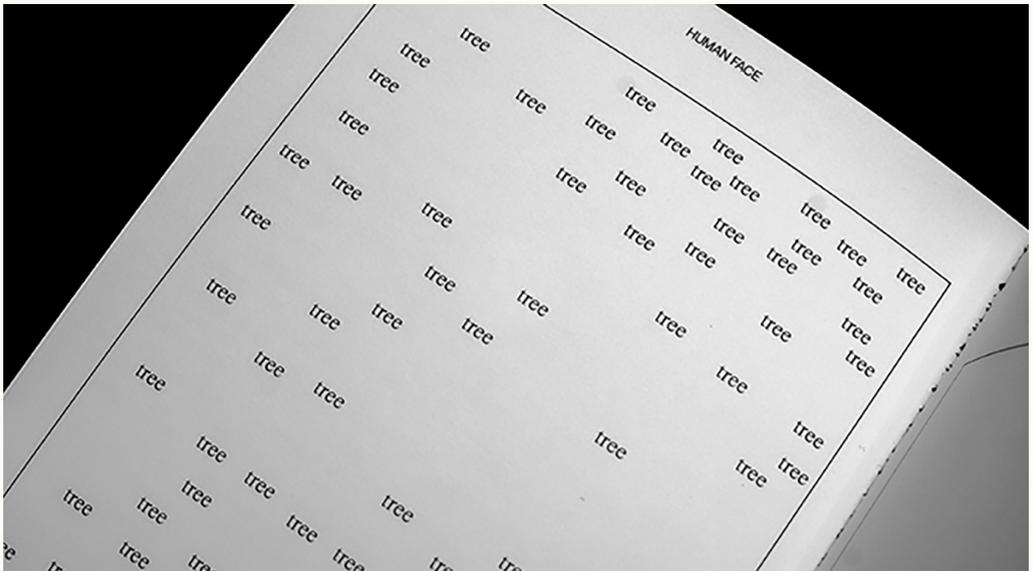c. Barnaba, *Crumpled Italia*, 2016. Detail.

Figure 5.
Casavola, *Human Face*, 2024. Detail.

7.7 Between Divergence and Convergence

Lastly, it should be noted that students have always approached this exercise, which, let us remember, is in addition to the group activities, with obvious interest. This is perhaps due to the fact that, as mentioned, infopoetry allows themes to emerge that might otherwise remain invisible. But we would like to think that there is also another reason: infopoetry is one of those experiences that allows one to think about the project in what we would call a *divergent/convergent* way (Guilford, 1967; Beaudot, 1973).

At first, the student is called upon to detach himself from established visions and beliefs, considered obvious and unchangeable, by facing the unexpected that *poetry-making* involves. Divergence is, as it were, an abductive and inventive movement towards otherness: that which appears foreign, that which does not yet have form and which only an inventive act can bring to light (Zingale, 2012; Bonfantini, 2021).

Convergence, on the other hand, is the movement towards the attainment of a goal through recourse to design methods consolidated over the years and well-tested techniques of execution. Here, it is both the inductive and experimental movement that prevails, as well as the deductive movement with applications of rules and procedures, the aim of which is to delineate an identity: of the artefact, of the genre in which it is placed, of its maker.

As can be understood from the presentation of the infopoetic experimentation, this is one of the cases in which it was possible to verify the effects of the encounter between the discipline of design and the research of a semiotics seen from a design perspective. But it is also a case in which the research finds its ground for verification or refutation precisely in education, in dialogical interaction, in an idea of *training* that goes beyond the mere acquisition of skills, where the *form* to be acquired is the site of the construction of a sense.

References

Accame, V. (1977). *Il segno poetico*. Munt Press.

Baule, G., & Caratti, E. (Eds.). (2017). *Design is : The paradigm for the culture of design. "Design and ": A manifesto*. FrancoAngeli.

Beaudot, A. (1973). *La créativité*. Bordas.

Benedetti, A., Briones, A., & Bellantuono, A. (2024). Algorithmic you. Un design-setting per la riappropriazione dei dati personali attraverso narrazioni poetiche e rivisitando modelli di poesia visiva. *Ocula*, *25*(30), 261–286.

Bertin, J. (1967). *Sémiologie graphique. Les diagrammes, les réseaux, les cartes*. Gauthier-Villars/Mouton & Cie.

Bocchi, G., & Ceruti, M. (Eds.). (1995). *La sfida della complessità*. Feltrinelli.

Bonfantini, M. A. (2021). *Scritti sull'inventiva: Saggi e dialoghi*. Mimesis.

Ciuccarelli, P. (2024a). On the relevance of infopoetry in designing with data: A designerly approach to trigger users' re-actions. In A. Benedetti, A. Briones, A. Bellantuono, P. Ciuccarelli, & S. Zingale, *Algorithmic you. What is Infopoetry? Libretto di presentazione*. Bibliothek Technische Universität, Darmstadt.

Ciuccarelli, P. (2024b). Un approccio umanistico e interdisciplinare alla visualizzazione dei dati: La via politecnica all'information design. In V. Bucchetti (Ed.), *Design della comunicazione. Un ritratto disciplinare: studi e traiettorie*. FrancoAngeli.

Eco, U. (1975). *Trattato di semiotica generale*. Bompiani.

Eco, U. (1984). *Semiotica e filosofia del linguaggio*. Einaudi.

Guilford, J. P. (1967). *The nature of human intelligence*. McGraw-Hill.

Jakobson, R. (1959). On linguistic aspects of . In R. Brower (Ed.), *On* . Harvard University Press.

Lorusso, A. M. (Ed.). (2005). *Metafora e conoscenza*. Bompiani.

Manchia, V. (2020). *Il discorso dei dati: Note semiotiche sulla visualizzazione delle informazioni*. FrancoAngeli.

Marres, N. (2015). Why Map Issues? On Controversy Analysis as a Digital Method. *Science Technology and Human Values*, *40*(5), 655-686.

Marrone, G. (2011). *Introduzione alla semiotica del testo*. Laterza.

Mauri, M., Colombo, G., Briones, A., Ciuccarelli, P. (2019). *Teaching the critical role of designers in the data society: the DensityDesign approach*.

Morin, E. (1990). *Introduction à la pensée complexe*, 1990; trad. di Monica Corbani, *Introduzione al pensiero complesso*, Sperling & Kupfer, 1993.

Neurath, Otto (1931). Visual education and the social and economic museum in Vienna. In M. Neurath, & R.S. Cohen (Eds.), *Empiricism and Sociology.* Reidel, 21-218.

Piccoli Trapletti, G. (2017). *Un coup de data. Infopoesia. Verso un approccio poetico alla visualizzazione*. Tesi di Laurea magistrale. Politecnico di Milano.

Poe, E. A. (1846). *The philosophy of composition*. University of Adelaide Library. July 8th, 2024.

Pozzato, M. P. (2001). *Semiotica del testo*. Carocci.

Prieto, L. J. (1977). *Pertinencia y práctica: ensayo de semiología*. Editorial G. Gili.

Sperber, D. & Wilson, D. (1986/1995), *Relevance. Cognition and communication*. Blackwell Publishers Ltd.

Valsecchi, F., Ciuccarelli, P., Ricci, D., Caviglia, G. (2010). The DensityDesign lab: communication design experiments among complexity and sustainability. *Proceedings Cumulus Conference 2010 "Young Creators for Better City and Better Life"*. Tongji University, China.

Venturini, T. (2010). Diving in magma: how to explore controversies with actor-network theory. *Public Understanding of Science*, *19* (3).

Zingale, S. (2012). *Interpretazione e progetto. Semiotica dell'inventiva*. Franco Angeli.

Zingale, S. (2016). Design as activity: a semiotic overview. *Proceedings of DRS 2016, Design Research Society 50th Anniversary Conference*. Brighton, UK, 27th-30th June 2016.

Zingale, S. (2020). Infopoesia: l'enunciazione poetica dei dati. Una sperimentazione fra arte e design della comunicazione. *E/C Rivista dell'Associazione italiana studi semiotici*. *14* (30), 366-373.