

# THE RHETORICAL ART OF DATA VISUALISATION

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Art that visualises data is commonly understood to enable a transparent understanding of a large amount of factual information. I argue that art which employs such a technique may also be understood to critique the value-systems and hierarchies of importance that give rise to the networks and data flows that are visualized. Art may open an engagement with what society has to occlude in order to maintain its existence without change.

Data visualisation techniques have been used by artists as a means to critique society, and in particular capitalism. Such art is often understood in terms of the reduction of an overwhelming amount of data to a meaningful representation. The availability of data, and its visualisation, is attributed with improving greater transparency and accountability of the systems that structure our lives. It is commonly regarded as desirable that the way in which data is presented should be transparent. [1] Data visualisations are understood as evidence of, and as an explanation for, the world. So called 'new media art' is regarded as a particularly effective site for such visualisations because of the opportunities it provides to interact with the underlying data.

It is arguable that a transparent representation of affairs as they exist is, in itself, not a critique of how things ought to be. The work of Arthur Danto provides an approach to art that responds to this issue. He argues that art that employs factual data does more than represent the world; it expresses a point of view about the content of the work. However, Danto's argument is weakened by maintaining a distinction between the form and content of art. Instead, starting from Derek Attridge's understanding of the work as a performative event, I will explore how art may provide the opportunity to acknowledge that which must be ignored by any given society if it is to remain unchanged. My argument is that, approached in these terms, interaction with data may uncover the contingencies in the way societies are constructed.

## *They Rule*

My argument will be progressed by engaging with *They Rule*, [2] which is an activist work of art by Josh On that has won a number of awards, including the Dutch Electronic Art Festival in 2003. It provides the viewer with the opportunity to interact with data about some major institutions and the boards of directors of the top 500 companies in the United States of America. The work exists in two versions, which respectively incorporate static data collated in 2001 and in 2004. This is clearly acknowledged on the site, which states that "*They Rule* is NOT a Live database of board members and companies. That information changes constantly. I hope to update the database annually, and try to ensure that the links are accurate at the time of launch." [3]

Each of the companies included in *They Rule* is represented by an icon of a company board table, which appears on screen surrounded by avatars representing the directors on the board. The size of an avatar reflects the number of company boards on which a director sits. As icons and avatars are clicked, the work allows connections between companies to be traced by the construction of network diagrams. It is

possible to discover, for example, that “the members of the boards for the so-called competitors Coke and Pepsi actually sit together on the board of a third corporation, Bristol Myers Squibb.” [4]

### The Representation of Data and *They Rule*

Christiane Paul describes how the work may be understood to employ technology against companies using the Web as a marketing tool, which “turns us into transparent customers.” [5] The subversive effect of the work is commonly understood in terms of a greater understanding of the world as it exists. It has been observed, “If only the economic realities it depicts were as transparent and intuitive as its navigational structure, this would be a more benevolent world. The ease and transparency of the design layout, combined with an intriguing subject make *They Rule* an exquisitely idiosyncratic icon of activist web-design. Visit it today before They Outlaw It.” [6]

Yahya M Madra explicitly contextualizes Josh On’s work in terms of a critique of capitalism: “In *They Rule*, the moment of appropriation, in its exploitative capitalist form, is represented as a system of networks. While ‘they’ do have proper names, what is represented here is not particular individuals, but rather ‘they’ as a collective of appropriators.” [7] However, directors qua directors are company employees. As such, it may be questioned whether networks of directors should be regarded as an underlying class of appropriators. In terms of global capitalism, my view is that the term “appropriators” is better reserved for the shareholders and their interconnecting portfolios of company shares. Such shareholders will include not only individuals, who may also happen to be directors, but also other companies.

The important aspect of Madra’s description is the attention it draws to the work as a systemic critique. The work focuses attention on a feature of the legal system of the United States of America. *They Rule* does not reveal that companies will always have boards of directors that are interlinked. It enables people to realise that companies may, but won’t necessarily, be connected in this way. *They Rule* illustrates that there are some directors (of companies recognised by the law as separate legal personalities) who sit on more than one board and, in the process, connect competitor companies. However, as an exploration of the work reveals, there is no guarantee that links between companies will be found. Indeed, it is entirely possible that even when networks of boards of directors are identified from *They Rule*, neither these nor even the companies, will still currently exist.

The content of the database employed by the work is fixed at given points in time. Accordingly, many of the connections it is possible to identify by using *They Rule* are out of date and may even have been so at the time it first appeared online. The implied premise of continuing to understand *They Rule* as having an impact is that, irrespective of whether the individual networks depicted remain in existence, the work enables users to visualise specific networks that illustrate an ongoing feature of the economy, which is permitted by company law. My argument is that the critical force of the factual representations of data in *They Rule* lies in the exploration of the underlying legal system through iterations made possible by the work’s interface.

### The Art of *They Rule*

*They Rule*, through depicting factual information, has been understood to reveal that there is something wrong with capitalism, or perhaps more specifically with the legal system of the United States of America. The existence of any specific network of directors may be unknown. However, the generic existence

of interconnections between boards and even the widespread extent of such links is not a revelation. This feature of the legal system of the United States of America has previously been identified and understood without the interactive creation of network diagrams. It is not immediately apparent that *They Rule*'s features, such as the manipulability and interactivity of the work's data, make it significantly different from other diagrammatic representations of historic data about a given state of affairs. Understood as art and approached through the work of the philosopher and art critique Arthur Danto, *They Rule* might be regarded as the expression of a value judgement. This would involve arguing that the work goes beyond representing the world as it is and visualises the point of view that it is wrong for a legal system to allow the formation of networks of interconnecting companies.

In 'The Transfiguration of the Commonplace' Arthur Danto engages with what distinguishes representations, such as diagrams, from works of art that may be visually indiscernible from such images. He argues that an artwork must be about something, which is to say that art expresses something about its content. In art there is a "double role of representation and expression" that must be engaged with when interpreting the work. [8] Artworks not only depict content, they also "project a certain point-of-view about whatever they are about. Whereas mere representations aspire to transparency, artworks express ideas and attitudes toward whatever they represent." [9] Approached in terms of Danto's argument, art that employs diagrams manages to do this, at least in part, because of the connotations diagrams have in our culture due to their use in disciplines such as economics and engineering. Understood in terms of the diagrams constructed in *They Rule*, the work simply represents the links between companies. However, as an artwork *They Rule* expresses condemnation of the interconnectedness of companies and their directors.

Danto's argument is an intriguing one but it raises a number of questions to which satisfactory responses are not provided in 'The Transfiguration of the Commonplace'. It is not clear to me that an account of *They Rule* in these terms provides a means to understand how, or indeed why, it is regarded as expressing a value judgement about the fact that company boards interconnect through directors. In addition it is possible to argue that the attitude expressed toward the content of the work does not itself escape from being part of the content. It is what might be described as meta-content or content about content. Danto briefly acknowledges this issue and reflects on the possibility that, when any representation is in some way self-referential, it will be an artwork. The task of examining content for the point of view expressed in it may recede away without end. Danto identifies this as a significant problem and suggests only that "the question in this form has not, to my knowledge been raised before in the entire history of the philosophy of art" [10]. My argument is that these issues may be engaged with through the work of Derek Attridge, which he explicitly acknowledges is much indebted to that of Jacques Derrida.

## A Legal System Less Violent

In the 'The Singularity of Literature' Attridge argues that art works should not be understood instrumentally as communicating meaning, but rather as events that give rise to new meanings and feelings. Despite the title of the book, and the fact that much of his argument deals specifically with literature, Attridge makes it clear that he considers his work is applicable to art in general. He proposes that works should not be understood in terms of an opposition drawn between form and content or meaning. Instead, Attridge understands art as "bringing into existence a configuration of cultural materials that, at least to a certain group and for a certain time, holds out the possibility of a repeated encounter with alterity." [11] Viewers respond, not to "an attribute or a substance, but to an event: more clumsily we

could speak of the performing of narrativity, metaphorizing, imitating, describing.” [12] The focus is moved away from a concern with the extraction of a work’s meaning toward an engagement with it in performative terms. Art stages an opening with that which an existing cultural order has to disavow in order to be able to continue without change.

Approached in terms of Attridge’s argument the critical force of *They Rule* may be understood in terms of the way in which it opens an awareness of the violence of the law. More specifically, this manifests in the way that the legal system of the United States of America allows companies to interconnect through their directors. My argument in this respect starts from the way that the work invites the focus of attention to be widened out from the factual accuracy of the data visualised to include the process of how that data is explored. The fixed nature of *They Rule*’s database, the concomitant datedness of the data, and the way in which the identification of the extent and nature of connections between directors is contextualised by the links that cannot be traced, all make the work weak when understood as a set of factual representations of networks.

The effect of the characteristics of *They Rule* is that it may be understood to hold the data as a fixed given, which directs attention towards the way in which meaning is constructed by means of the selection and manipulation of data to create visualised networks. The screen quickly becomes cluttered with data after expanding a few companies’ boards. Directors with no contacts between the companies selected to be searched need to be deleted from the screen. In the process of locating networks of interconnecting boards of directors users are, in effect, compelled to be selective about the data that remains in sight. In the event that users want the remaining data to appear in the form of a visually appealing diagram then the icons and avatars that remain, together with the lines that connect them, have to be moved around the screen until the desired pattern for the network is achieved.

There are many fascinating diagrams saved on *They Rule* but it should not be forgotten that not all investigations using its database result in establishing the existence of network connections. I propose that the critical force of *They Rule* arises out of the process that users work through to identify and construct the visualisations of connections between (competing) companies (that have been) permitted by the legal system of the United States of America. The work invites users to focus on the interface to, and the interaction that it provides with, its database. It opens the opportunity to reflect on the multiple visual iterations of data derived from a legal system. *They Rule* directs the attention of those users who repeatedly explore the work’s databases toward the legal system that underlies all of the visualised data. In the process it stages the chance of judging whether it is just for the networks that are identified to (have been allowed to) exist.

The work may be understood to open an engagement with justice because *They Rule* stages an aporia in which every legal system is entangled. All laws are necessarily applied at times that are different from those at which they were formulated and brought into being. This means that any given law will need to be applied in specific individual situations, not all of which can be anticipated. As Derrida points out “Each case is other, each decision is different and requires an absolutely unique interpretation, which no existing, coded rule, can or ought to guarantee absolutely.” [13] The problem is that, in addition to being applied in specific situations, laws are also required to be general enough to allow them to be enforced equally and in a way that is not arbitrary. [14] Legal systems will always need to make efforts to recognise the specific circumstances of each case so as to enable there to be justice despite the generality of the law. However, ultimately it is impossible for decisions to be made as to the legal merits of every case on an individual basis whilst at the same time maintaining the universality of the law.

The more established and general laws are the more apparent become the difficulties associated with trying to reconcile the general with the particular. In broad terms, the laws that enable companies to be brought into existence and provide the framework within which they are operated are well established and accepted in the United States of America and other countries around the world. The inevitable violence of the law is in the way it asserts the authority to determine what is generally acceptable and to demarcate when exception(s) will be permitted in the name of justice. *They Rule* enables the visualisation of iterations of combinations of companies and in doing so opens an opportunity to evaluate this violence. This is because it provides the opportunity to consider the (im)possibility of a legal system that is general enough to apply equally and at all times to all directors, whilst at the same time being able to respond to specific circumstances that may mean that connections between companies are entirely legitimate and justifiable. *They Rule* invites reflection about whether the law could be less violent and in the process become more just. The force of *They Rule* is in the way that it directs critical attention, from outside the legal system, to the application of the law and the inevitable violence of the contingent boundaries it establishes.

## Conclusion

I have sought to argue, through an interpretation of the work *They Rule*, for an approach to art that employs data visualisation that goes beyond understanding such work as a transparent depiction of content about the existing world. My aim has been to engage with *They Rule* both in terms of its factual content and by identifying the significance of the interface that has been provided to its content. The work enables the creation of visual iterations of networks made possible by the laws of the United States of America. This process invites users to become aware of the (im)possibility of a legal system that can be sufficiently general to be both fair and equal for all and at the same time able to make exceptions in specific cases. Attention is drawn to the violence of the legal system of the United States of America in the way it claims the authority to create and enforce the regulations that govern the way in which such an aporia is to be resolved. As such, *They Rule* stages an opening with that which an existing system has to disavow in order to be able to continue without change. While the law must necessarily be violent, when the possibility is raised that the law could be articulated differently and “grounded on less arbitrary modes of authority”, there is always scope for a more just legal system. [15] The political impact of *They Rule*’s visualisations is to unsettle claims to transcendence by the law, and in so doing open it to transformation by those it presently excludes.

## References and Notes:

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