

## 9 Epi-pro-logue

### An anthropological theory of distortion

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#### Preamble

This text was, in essence, originally circulated as a concept paper at a workshop held at the University of Copenhagen, in January 2012, to inaugurate the project, 'Optimal distortion: Ethnographic explorations of paradoxical connections', that had been funded by the Danish Research Board for Culture and Communication (with us as its two principal investigators). By concluding the present volume with an 'epi-pro-logue'<sup>1</sup> that was written before the preceding case studies were themselves completed, we hope to make a final instantiation of the 'non-linear' logic of distortion that we have sought to explore throughout this book. From the outset of the research project it had been stipulated that processes of distortion might offer a germane arena for studying how certain logics and forms of linear causality come to mutate in productive ways: hence, the present text might be a further empirical illustration of this theoretical hypothesis. For, if the order of academic texts are conventionally based on the premise that the conditions for a given line of argument are ideally set up prior to the subsequent analyses, then could it not be that certain lines of ethnographically driven anthropological analyses require precisely the opposite – namely, that the process of gaining insight into a certain problem occurs by reversing the relationship between premise and argument, cause and effect?

#### Introduction

One of the biggest unresolved problems of social theory is the disjunctive relationship between causes and their effects, including the unresolved question of the unintended consequences of human actions (Beck 1992; de Certeau 1984; Tsing 2005). While anthropologists and sociologists have come a long way in terms of understanding the nature, or more precisely the causes, of agency as a dynamic compromise between individual intentions and social and cultural constraints (Bateson 1972; Bourdieu 1972; Sahlin 1976), little progress has been made when it comes to understanding what happens in the slipstream of acts, that is, what the outcomes of agency are.



Figure 9.1 The cause-effect black box of contemporary social theory.

To borrow a term from actor-network theory (Callon and Latour 1981), we may thus speak of a 'black box' in current social theory, namely the critical gap in knowledge about what happens in the interstices between a cause and its effect (Figure 9.1).

The aim of our research programme might be said to have been to investigate what is going on inside the black box between causes and their effects in social and cultural life, and hence also to theorize in a new way the disjunctive relationship between intentions and their unintended consequences. Based on an anthropological adaptation of the concept of distortion, our overarching hypothesis has been that by exploring 'distortion' as a necessary property of human life we might reach not just a better understanding of how, why and when intentions fail to achieve outcomes, but, more generally, this concept will also enable us to explain how a given event demarcated by initial inputs and final outputs possesses a peculiar connectedness, which is not causal in any linear or direct way. In fact, and this is our second hypothesis, many actions turn out to be successful ('optimal') *because* their consequences are decoupled from what motivated them in particular ways and degrees. While such 'optimal distortions' may at first seem random, they are, we claim, amenable to empirical investigation through ethnographic fieldwork and anthropological comparison.

### Concepts of distortion

Our understanding of the concept of distortion draws on, but is not identical to, conventional meanings of the term. According to the Webster Dictionary, 'distortion' has two principal meanings. It refers (a) to the act of twisting something out of meaning or proportion, or natural, normal or original shape; or (b) the condition of something becoming perverted. Casting the net more widely, an internet search produces six different clusters of meanings of the term, which it is relevant to repeat here at some length: (1) a change for the worse, deformation, damage, impairment, harm; (2) the spatial arrangement of something as distinct from its substance – crookedness, torsion, tortuosity, tortuousness, contortion; buckle, warp (a shape distorted by twisting or folding), gnarl, knot; (3) an optical aberration resulting from the failure of a lens or mirror to produce a good image; (4) a change in the waveform of an acoustic or analogue electrical signal, the difference between two measurements of a signal (as between the input and



Figure 9.2 Distortion as a site for turning inputs into deformed outputs.

the output); (5) the act of distorting something so it seems to mean something it was not intended to mean – over-refinement, twisting, straining, torture, falsification, misrepresentation, a wilful perversion of facts; and 6) an error, fault, mistake, a wrong action attributable to bad judgment or ignorance or inattention. In sum, the most common meaning of the concept of distortion thus appears to be that of an alteration of any form, content, or sense, which renders some sort of original input subject to a radical, irreversible and often unwanted transformation (Figure 9.2).

In our model, while retaining this meaning of distortion as the site of irreversible deformations of inputs into outputs, we propose to conceive of distortion as an intrinsic and indeed necessary predicament of social life and human existence. Rather than regarding distortion as an untoward eruption or a perverted outcome, then, we wish to explore it as an arena of unavoidable and often desirable *sui generis* creation, whose potential utility and significance can only be established retrospectively. Something emerges that is irreducibly different from what preceded it, and it is so distinct that its divergence could not have been anticipated, and thus may not even fully be grasped afterwards. Distortion is thus when something irreducibly new arrives seemingly from nowhere in a flash of *ex nihilo* creation. Something gives on to something else, but in the form of a mutation or transfiguration instead of an identifiable cause and predictable effect; there is contiguity between the input and the output, but the logic conjoining them transcends the lacking continuity between them. By treating distortion as a variable vector of transformation wedged in between actions and their outcomes, or between intentions and their consequences – as a degree and scale of change which there can be both too much and too little of, and which may thus be manipulated and optimized – our ambition has been to theorize in a new way the irreducible gap between causes and effects in social processes.

### Non-linear distortion

To pin out precisely what we mean by 'distortion' and why we believe that this concept will allow us to break new ground in the social scientific study of human actions and their outcomes, let us now consider in some detail the meaning of this term in acoustic physics. From the study of acoustics and sound, we learn that distortion is a measure of 'signal impurity', which expresses the quantifiable ratio of the undesired to the desired component of a given signal. If we consider the production of a sound wave, the relationship between input and output can ideally be characterized by a perfect gain where the waveform maintains its transfer characteristics (e.g. a single

frequency) and in this regard, distortion expresses the change in the signal's waveform that will appear in any system that is not ideal. Although any difference between the shape of the input and output waveforms can be defined as distortion, we limit our discussion here to the particular qualities of so-called 'non-linear distortion' (see Figure 9.3). In mathematics, a linear system is one whose output is directly proportional to its input, e.g. a straight line or an exponentially increasing curve. In contrast, a non-linear system does not change in proportion to its input and therefore cannot be decomposed into a set of individual parts of which the output is the aggregated sum. Non-linear distortion, then, results from the intervention of a non-linear transfer characteristic which adds to the initial waveform so that the eventual output signal contains components that were not present in the original frequency spectrum.

Not unlike high modernist social scientific (say, Marxist) explanatory models from which all effects can in principle be deduced and explained (cf. Friedman 1974), a non-distorted waveform represents its own explanatory context via the proportional relationship between input and output. Any variable to be examined is already given by the properties of the axiom or waveform. Conversely, non-linear distortion constitutes an emergent system that cannot be understood merely as a quantitative addition to the initial form. Through the immediate conjunction, the properties of the waveform are fundamentally altered so that the eventual output loses its proportional relationship to the input. Put somewhat differently, the emergent (and distorted) waveform is no longer causally determined by its original state.

Because non-linear distortion in acoustics takes the form of an altering sound, it operates – and is identifiable – as an inherently temporal phenomenon. It is by consequently examining the progression and development of the initial input waveform that a transformation might be discerned. If we are to examine the discontinuous mechanisms of emergence active through distortive processes, however, we need to momentarily bracket the emphasis

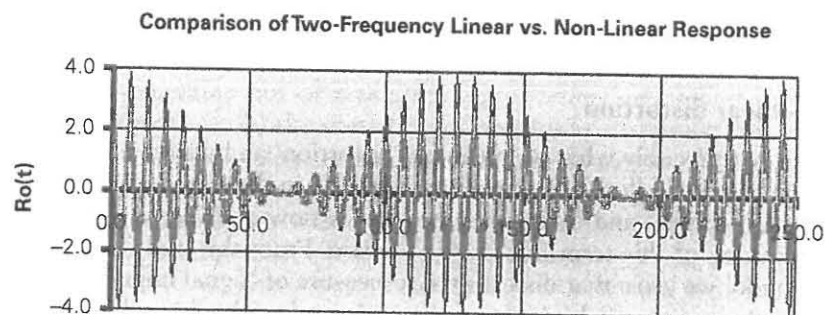


Figure 9.3 Non-linear acoustic distortion.

Source: S. Errede, *Theory of Distortion II*.<sup>2</sup>

on linearity that is implied by the input–output relationship and instead focus on the nature of the transformation inherent to distortion itself. A particular waveform is, in a sense, identical to itself; that is, the waveform is nothing but the particular shape of a signal moving in a physical medium. If we then consider merely the emergent mechanisms that are active when a given waveform is affected by a non-linear transfer characteristic, it clearly appears that distortion involves a radical transformation not of the waveform but, rather, of the ontological properties of the wave as such.

In other words, in processes of non-linear distortion, the distinction between form and content irrevocably collapses and what emerges in its place is a momentary but at the same time infinite 'stretching' of what the distorted phenomenon might potentially be.

### An anthropological theory of distortion

We have now done the necessary conceptual groundwork for sketching an anthropological theory of distortion. Although we certainly do not wish to claim that sound waves and human agency are similar phenomena, the model of non-linear distortion in acoustics provides us with some useful conceptual ammunition to tackle in a new way the fundamental social scientific problem which our project has attempted to resolve; that is, what happens in the void between a cause and its effects in social and cultural life. It does so by allowing us to question not only the proportionality of the relationship between input and output (or cause and effect, if you like) in social and cultural processes, but, equally important, the assumed solidity of a given ethnographic object, ranging from individual human intentions to big social collectivities. As we have seen, one of the central properties of distortion in acoustic theory is therefore that it inserts itself as a kind of 'wedge' (cf. Nielsen 2014) between inputs and outputs, or causes and effects, which ensures that the relationship between the two ceases to be simple, linear and thus predictable and instead becomes irreducibly complex, non-linear, and hence unpredictable. It does so by 'adding' something qualitatively new to the acoustic picture that cannot be broken down into disparate acoustic components (sound waves), but rather must be understood as a radical and irreversible transformation of the acoustic system (i.e. the sound) as a whole. It is precisely this excess of creativity, which so to speak takes place along a vector orthogonal to the line that adjoins inputs and outputs to another, that we are interested in exploring through our research programme. For is it not precisely here, inside the space that 'swells up' between cause and effect as a result of distortion's creative excess, that we can locate the keys for unlocking the black box of contemporary social theory?

Consider Figure 9.4, which is an attempt to depict the 'space of swelling' that distortion necessarily occupies in the interstices between input (cause) and output (effect) within a given social or cultural system. Put in the most abstract of terms, distortion is here presented as an area of excess



(or, in more Deleuzian terms, an intensive spatium (Deleuze 2004)) which is defined by two vectors that run orthogonally to each another, namely a cause–effect vector and a form–content vector. Together, these two vectors – or could we say, paradoxical connections – demarcate a co-ordinate system, which may be described as ‘complex’ and ‘non-linear’ precisely because of the fundamental unpredictability of every new swelling that each successive distortive moment brings about.

Thus, on this anthropological model of distortion, the relationship between form and content is as intimate and yet disjunctive as the one between cause (input) and effect (output). From the previous discussion of non-linear distortion in physics, we learned that the progressive transformations of a given waveform are traceable only by collapsing the distinction between its shape and its fundamental properties. As the sound wave expands and contracts, its interior qualities change accordingly simply by being identical to its form. It might therefore be argued that non-linear distortion involves a momentary levelling out or even collapse of the distinction between the form and content of a given phenomenon. Whatever the phenomenon might become, or rather, whatever (morphological) components the phenomenon might eventually contain come into being simultaneously on the same plane of emergence without necessarily being structured by an interior ordering mechanism stipulating a fixed relationship between form and content.

On this perspective, form and content – as well as input and output – are emergent differentials rather than sets of dichotomous pairs. These interconnected components are perhaps best understood, then, as ways in which particular portions of experience relate to each other as transformational pulses or tendencies in an open system. Although a structured relationship will eventually seem to characterize the system (e.g. when ‘x’ is contained by ‘y’ as in a configuration of social values organized around ‘distance’ as guiding trope (Pedersen 2013; Pedersen and Bunkenborg 2012; Stasch 2009)), during distortive processes, no ordering principle exists separate from what is subsequently ordered. Rather, distortion pulsates through a peculiar swelling that adds to the process by continuously folding cause

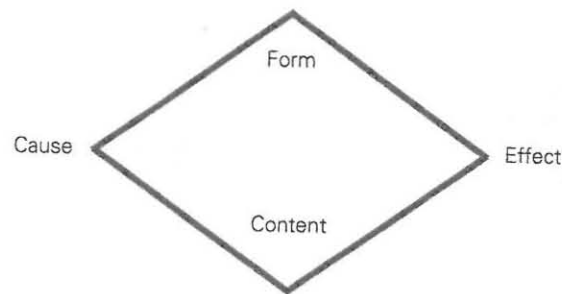


Figure 9.4 An anthropological model of socio-cultural distortion.

and effect inwards. In this regard, an output (or effect, if you like) is what has been left over when the transformational process momentarily wanes. Without being able to distinguish itself in kind, an effect contracts in a particular way the generative potentials of the distortive process. In a nutshell, there is no exterior ‘container’, as it were, that contains or activates a distortive potential; there is only the distortion as subject to its own actions upon itself.

If, as we claim, the distinction between form and content becomes untenable in the present context, an obvious question to pose is consequently what a distorted phenomenon *is*. When something that initially looks like a form is distorted – say, a tone in a musical composition – it is easy to imagine a space of potential in which new forms may emerge (intended or not); the underlying assumption being, of course, that the assumed distinction between form and content remains intact. Conversely, under the tacit and (we claim) unsubstantiated assumption that contents are ontologically distinguishable from forms, it is much more difficult to accept an analogous disfiguration of something that looks like content, like, say, a dialogue in a novel or a film. What we have seen above, however, is that a distorted phenomenon is precisely the simultaneous transformation (or, to stick to the conceptual vocabulary already laid out: deformation or disfiguration) of both form and content. Put somewhat differently, in order to understand what a distorted phenomenon might be (or become), we need to bracket our proclivity for keeping one set of elements invariable (form, content, etc.), hence making it much more challenging to determine the properties and capacities of an eventual outcome (for two different but comparable theorizations of and approaches to the relationship between form and content, see Keane 2013 and Rapport 1993).

In a nutshell, then, a distorted phenomenon is nothing but the way it undergoes continuous transformations and through that process adds to its own mutations. Rather than posing (quantitative) questions about content and form, it is therefore more relevant to examine the (qualitative) ways in which something mutates and swells as it advances. And here we get to our final point. Evidently, not all distortions have effects that can be examined and, more importantly, reverberate with their surroundings in ways that generate productive potentials. We therefore need to introduce a concept by which we can denote those kinds of distortive stretchings of the creative space between intentions, cause and effect where outcomes are decoupled from inputs in particularly productive ways.

### Optimal distortion

Optimal distortion may be defined as what happens when a gap between the cause of an action and its effects is stretched out to such an extent and in such a way that, retrospectively, this disfiguration of agency emerges as not just a good but also as a necessary thing. In introducing this concept we thus

wish to denote any social practice or cultural form by which the outcome of a given human action is diverted from its intentions most efficiently. Indeed, our research program was designed with a view to identifying and comparing different 'tipping points' (cf. Gladwell 2000) at which distortion in this way enables rather than obstructs agency.

Now, since a given incident of optimal distortion can only be determined and assessed after it has 'happened', the question of temporality would seem to assume particular importance when it comes to investigating this distinct anthropological subfield of social and cultural distortive practices. In fact, is that not what the concept of intentionality basically is: a post-factum identification of an 'original input' or 'first reason' that serves as an imagined endpoint for a reading backwards through what looks like a comprise between of plan and planlessness, or individual wants and socio-cultural constraints (Nielsen 2011; Pedersen 2011; Robbins 2007; Wagner 1981)? Understood in this way, optimal distortion emerges as a paradoxical (impossible) stabilization of transformation: it denotes an inherently doomed attempt to pin down what the different components of a process of non-linear distortion are. After all, according to the anthropological model of distortion outlined in the previous section (Figure 9.4), inputs and outputs, as well as forms and contents, are nothing but limits or endpoints of an interior (and *anterior*) space of swelling – input, output, form and content are merely 'after-effects' of a *sui genesis* state of distortion, or could we say, ontological creativity. Accordingly, intentionality may be defined as the after-effect of a given (optimal) distortive event.

In sum, by developing a new theoretical vocabulary for ethnographically studying how individual and collective intentions dovetail social and cultural practices, the ambition has been to gain new insight into the little-understood dynamics of cultural creativity and the black box of unintended consequences. To achieve this, we have formulated the concept of (optimal) distortion, which refers to the paradoxical and non-linear production of creative excess by which people's wills, desires and dreams come to be twisted and yet sometimes for this very reason also to be fulfilled via inevitable (and sometimes necessary) disfigurations of their intentions, goals, and plans.

## Notes

1 In describing the present text as an 'epi-pro-logue', we find inspiration in the concept of 'function prologue' from computer science, specifically so-called assembly language programming, where it is used to denote the part of a computer program that sets up certain basic parameters for the execution of the program as a whole. More precisely, according to Wikipedia (accessed 8 July 2016), in 'assembly language programming, the function prologue is a few lines of code at the beginning of a function, which prepare the stack and registers for use within the function. Similarly, the function epilogue appears at the end of the function, and restores the stack and registers to the state they were in before the function was called'.

2 [https://courses.physics.illinois.edu/phys406/Lecture\\_Notes/Distortion/PDF\\_Files/Theory\\_of\\_Distortion2.pdf](https://courses.physics.illinois.edu/phys406/Lecture_Notes/Distortion/PDF_Files/Theory_of_Distortion2.pdf). Downloaded 10 January 2012.

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