The scope of our paper is to analyze the problematical status of $x$ as a sign in the logic of a literary text. A concise text addressing and releasing the semiotic energy of $x$ is a recent song by German industrial band Einstürzende Neubauten, conveniently titled "X".¹ "X" is the third song on Supporter Album #1 (2003), which EN recorded without the backing of a record label, relying instead upon supporter participation.² We will argue that "X" chronologically recounts the different stages of a love affair gone wrong. Our interpretation will be based on a semiotic analysis which follows the narrative pattern of the song closely.

In Peircean semiotics, three kinds of signs are discerned: iconical, indexical and symbolical. These three types have different relations to the object world: imitational, a physical connection and an association by usage respectively.³ Peirce's approach was profoundly influenced by the Cambridge Analytical Society, an organisation which advocated educational and notational reforms in mathematics.⁴ Incidentally, one of their more controversial proposals was to adopt the Leibnizian $dx$ rather than Newtonian fluxions ($\frac{d}{dx}$, $\dot{x}$, $\ddot{x}$, etc.) in differential calculus.⁵ Though these debates on notation have been a crucial impulse for Peirce's theory of signs, this does not imply that $x$ as a semiotic phenomenon has been studied in its own right.

It may seem odd to encounter the rather abstract, almost technoid sign $x$ in a love song. However, this squares with EN's earlier love songs built around unexpected discourses: horticulture in "Zebulon", botany in "Blume" and astrophysics in "Die Interimsliebenden".⁶ The Berlin band was founded in 1980, and has been at the vanguard of the avant-garde ever since. Apart from musical collaborations (EN's front man Christian Emmerich, better known as Blixa Bargeld, was for many years one of Nick Cave's Bad Seeds), the band has been involved in various literary co-operations. Examples include a theater project with Peter Zadek at the Hamburger Schauspielhaus (1987), as well as stage productions of Heiner Müller's Hamletmaschine (1990)⁷ and Werner Schwab's Faust (1994).⁸ This interest in literary culture is present in many of EN's lyrics too: the track "Bildbeschreibung" is a musical "absorption"⁹ of another Heiner Müller text, the song "Sie" is modelled along the lines of a theater play, and "Die
Befindlichkeit des Landes" reconstructs Walter Benjamin's *Über den Begriff der Geschichte*. We are therefore convinced of the intrinsic literary value of "X".

A transcription of the "X" recording and a translation is printed below. The English translation will be used as the main reference, except where it does not fully accord with the German original.

```
x bezeichnet die stelle
wo einst ein herzfoermig lindenblatt
auf des helden schulter fiel
unbenetzt von drachenblut
fuer immer ungeschuetzt

x bezeichnet die stelle
die die geliebte hat markiert
mit kreuzstich

ein x gibt meine stimme ab
ist meine namenlose signatur
unterzeichnet wird der pakt

xy heiβt maennlich und bleibt weiter ungelost
ein doppel-x macht dich zur frau
ein einzelnes x am ende:

x bezeichnet die stelle
wo ein schatz vergraben liegt
wo der hund begraben ist

xxl ist viel zu gross
xxx ist fuer kinder verboten
x - das ist die kreuzung, nicht die wegegabelung
apfel-x und weg damit

x bezeichnet die stelle,
die unbekannte variable in der gleichung
aber x ist nicht unbekannt

meine ex macht mich fertig
schleudert ihre bitterkeit ihr gift und ihre galle

wie geht's? nicht gut?
so siehst du auch aus...
trinkst du noch was?
oder gehst du gleich wieder?

x bezeichnet die stelle
die die geliebte hat markiert

am ende mache ich drei kreuze
auf ex!
auf ex!
auf ex!
auf freiersfussen
auf freiersfussen
auf freiersfussen
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x marks the spot
where once a heart-shaped lime leaf
fell on the hero's shoulder
unmoisted by dragon blood
forever unprotected

x reveals the spot
which the loved one has marked
with cross-stitch

an x gives my vote
is my nameless signature
signed is the pact

xy means male and stays unresolved
a double-x makes you a woman
a single x at the end:
a kiss

x indicates the spot
where a treasure lays buried
where the rub is

xxl is way too big
xxx is forbidden for children
x - that is the crossroad, not the bifurcation
doesn't really matter
apple-x and away with it

x marks the spot,
the unknown variable in the equation
but x is not unknown

my ex is all over me
slings her bitterness her poison and her gall

how are you doing? not well?
that's how you look as well…
care for a drink?
or are leaving shortly?

x reveals the spot
which the loved one has marked

finally I cross the ruby
to ex!
to ex!
to ex!
out courting
out courting
out courting
```
The opening of the song references a highlight of early German literature, the *Nibelungenlied*. In the first two stanzas Siegfried's heroic victory over the dragon is evoked. During the struggle, Siegfried bathed himself in the blood of the slain monster, which made him invulnerable, except for one little spot below the shoulder, covered by a "heart-shaped lime leaf." Only two people knew the exact location of his weakness: Siegfried himself, and his wife Kriemhild. The story reaches a dramatic turning point when Kriemhild is tricked into disclosing this secret to Tronje Hagen, a vassal of King Gunther, who asks her to mark the spot with an embroidered cross on his robe, so that he might protect Siegfried more adequately in battle. Hagen, however, abuses this knowledge to kill Siegfried during a hunting trip.13

From the very start it is possible to read the song through the lens of Peircean semiotics. In the rendition of the Nibelungen story the phrase "x bezeichnet die Stelle" already expresses different properties of x, modulating between semiotic categories. The second occurrence of "bezeichnet" (literally: "puts a sign on") is a more or less clear-cut case: x is an iconic sign for the cross stitched on Siegfried's robe, and hence indexical for his vulnerability. The consecutively applied semiotic functions of index and icon can be expressed in the German "markieren" and "bezeichnen": Kriemhild embroiders the cross, thus indexing the spot, and therefore the x in the second stanza is the icon which represents the stitch.

In the first stanza, however, x opens the scene and is purely symbolic. As the precise location of Siegfried's weak spot is still unknown, the textual sign x symbolizes this indeterminacy. This "x bezeichnet die Stelle" is a sign of pure presence without specification, merely an allocation in a (con)text: the sign x, which is still empty at the beginning of the song, is ready to be immersed in meaning. And in our reading the first layer of meaning is clear through the Nibelungen reference: the dangerous game of love, which can expose vulnerabilities.

The next stanza uses further cultural references of x, where x is a symbolic sign: voting and putting one's signature to contract. On the level of the love story, the relationship is sealed with a covenant in which the male party has only a passive role. Although the signing seems to be voluntary, the passive voice of "signed is the pact" is remarkable – in retrospect, it accords with the subject's passive role in "an x gives my vote." Whereas culturally, x as a signature characterizes the "nameless" illiterate, the text thematizes the difference between x as an iconic sign (x for the cross drawn by the illiterate) and as a letter of the alphabet: for the illiterate an x is a cross; for the literate, an x. Only by comparing the performance/recording with the lyrics is this difference given voice – Blixa pronounces the x as a letter (/iks/), not as "cross".
This ranging between cultural extremes – from literary references to illiteracy – is further extended when the lyrics of the fourth stanza retreat into biology. In genetics, the 23rd chromosome pair determines sex. This pair is a combination of the single chromosome types \(x\) and \(y\). The equations for the chromosome pairs are \(x + x = X\) (female), and \(x + y = Y\) (male). The lyrics highlight an interesting ambiguity of this naming system. The name \(x\) was originally chosen by Hermann Henking to designate a chromosome pair that was significantly larger than other observed pairs and had deviating behaviour during the splitting process of semen cells.\(^1\) A decade later, "Nettie Stevens then simply continued the alphabetical sequence when she named the Y."\(^2\) The symbols for the chromosome pairs X and Y have also acquired iconical meaning in a contemporary context, because in educational charts and pictures these are commonly represented as X and Y.\(^3\) Hence, \(xy\) contains an \(x\) only on the symbolic, not iconical level and – in the textual logic – "stays unresolved", whereas the female can be characterized as \(X/x\) on both levels), with icon and symbol in a strong (and fearful) symmetry. Only as a symbol, \(x\) produces the elective affinities that bring together both sexes, "a single \(x\) at the end: a kiss."\(^4\)

Notwithstanding kisses, \(x\) now unleashes its more disturbing undertones in the next phase of the relationship we are unravelling. Indexing – as on a map – the hidden treasure (which at first sight seems promising), \(x\) also heralds an upcoming crisis. The German phrase "da liegt der Hund begraben" (literally "there the dog is buried") is used to indicate that a certain something is the cause of problems, equivalent to English's "there is the rub." The etymology of the phrase links it to the treasure, since dogs were assumed to guard treasures hidden underground in German folklore.\(^5\) In the context of a burial site, \(x\) is of course also an iconical reminder of a cross, a sign pregnant with symbolic meaning as well.

The sixth stanza maximally employs the more profane usage of \(x\). Until now, we find that \(x\) has been constructed in various registers of higher culture: literature, alphabetization, science and mythology. The last line of stanza five – though of mythical origin – already announces a lower register as it is a colloquialism. This is followed by the enumeration of xxl (very large clothing), xxx (pornography), \(x\) (the traffic warning sign), "\(x\)-beliebig" (in German a colloquial adjective meaning approximately "all the same") and apple-x (the cut command on Macintosh computers, equivalent to control-x on MS Windows systems). The order of these references map the gradual decline of the relationship. The paragraph sets out with an overflow of \(x\)s, implying the liaison is getting too big (for at least one of the partners): "xxl is way too big."\(^6\) One important issue in the growing uneasiness is the question of sex. xxx here does
not merely stand for pornography in a strict sense, but also sexuality as physical pleasure, not as a means for procreation: "xxx is forbidden for children."

"x – that is the crossroad, not the bifurcation" marks the volta. For the first time the process of adding meaning to x is not simply continued: the assignment also comprises a non-inclusion. After the coming together of the two lovers, their paths of life can either cross, or merge into being together:

If we take into account the fact that y (the bifurcation) is associated with the male, the line suggests that it is the female who breaks up the relationship. The x changes from representing something that the lovers shared (a kiss) to representing their dispute and parting (the crossroad). For the woman, it is all the same: "x-beliebig sowieso," translatable as "for the love of x." She holds the paramount position. Consequently, she can hit the apple-x keys and “cut” the affair, combining the force of both icons: apple and x.19

In a pensive mood, the lyrical I turns to mathematics to summarize the end of the affair: "x marks the spot, the unknown variable in the equation / but x is not unknown." Historically, x was introduced into symbolical algebra by René Descartes in Geometry (1637) to signify unknown quantities.20 Interestingly, in early German linguistics x was considered a rather superfluous letter,21 but became indispensable in and because of mathematics. In the life equation of the lyrical I, however, x "is not unknown": the textual accumulation of meanings has defined x as the female factor, the vulnerable spot of the male.

As the phonemes change in the next stanza from /iks/ to /eks/ – a subtlety absent in English – these high-brow musings unpleasantly end as his ex enters the scene. The expression is tinged with sexual punning: the double meaning of "my ex is all over me" is also present in the German "meine ex macht mich fertig."22 This alludes to the end of both sexual and relational bliss: she “slings her bitterness her poison and her gall." The song is then interrupted by a bored female voice...

For the male, the apple-x only cut, it didn't do "away with it": the content has remained on the clipboard. x, having gone through various semiotic transformations, returns to its origins, the icon and index of the Nibelungen context: "x indicates the spot / which the loved one has marked" (which implies the symbolical x of the first stanza as well). At this point in the song, the line has accumulated dramatic overtones reminiscent of the tragic development of
Kriemhild and Siegfried’s relationship, which was only hinted at in the first stanzas. "X"s narrative construction is now complete.

Now that x has disappeared, the lyrical I can fully focus on its symbolic counterparts, viz. the cross and ex. Literally meaning "at the end I make three crosses," "am ende mache ich drei kreuze" is a colloquial expression of relief that one does not have to deal with someone any longer. The three crosses are repeated in the toast "to ex", but one should also know that "auf ex!" is German slang for swallowing a drink in one gulp (similar to the Latin toast "ad fundum" - "to the bottom!"). A pendant to xxx, the triple toast "auf ex!" can finally do away with the memory of "ex", opening new possibilities - he goes "out courting".

Although x is one of the most depersonified and abstract signs in modern discourse, it nevertheless has accumulated very specific meanings over time. The song is a rollercoaster ride through x’s manifold discursive manifestations and semiotic shifts, mapping the evolution of a love affair. "X" leads us from poetic literacy to biology and the profane, continually modelling aspects of the complex interactions between male and female. No longer "unknown," the female factor x ends the affair - consequently, x becomes ex. The prophecy buried in the Nibelungen reference is now fulfilled. The lyrical I abolishes the accumulated meanings of x in his triple toast "to ex", opening new horizons.

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1 Einstürzende Neubauten means Collapsing New Buildings. Hereafter, we will abbreviate the band name as EN. Recently, Blixa Bargeld has commented on the label 'industrial band': 'We are not trying to do something that is painful or unlistenable. There was always also the wish to be entertaining. I have to accept the term industrial because it is so widely used in the U.S., but I never thought we are an industrial band’ (Ken Micallef, "EINSTURZENDENEUBAUTEN," Remix, April 2004, http://www.findarticles.com/p/articles/mi_m0KXY/is_4_6/ai_114805981)

2 EN, "X," Supporter Album #1, Fredbank/BMG, 2003. Some tracks from this album were re-released on Perpetuum Mobile (Mute/EMI, 2004), but ‘X’ was not one of them. One of the authors of this essay was a supporter for the Album #1 project.


5 The main reason the Analytical Society proposed change was the typographical difficulties with Newtonian notations for differentials. In 1755 Leonhard Euler remarked that Newton's 'mode of symbolizing, as a matter of fact, cannot be disapproved, when the number of points is small, since it can be recognized instantly by counting; however, if many points are to be written, it carries with it the greatest confusion and very many inconveniences' (Leonhard Euler, Institutiones calculi differentialis (Petrogrod, 1755), 100. quoted in Florian Cajori, A History of Mathematics: Newton, Lot: The Macmillan Company, 1929, 2:197–206 (on Newtonian and Leibnizian notations) and 2:211–220 (on criticism of the notational systems, including criticism by the Analytical Society and Peirce's father).


10 Heiner Müller, "Bildbeschreibung," Werke 2: Die Prosa (Frankfurt am Main: Suhrkamp, 1999), 112–119;
EN, "Sie," Tabula Rasa;


12 The lyrics on the official EN website differ slightly from the transcript. Compare EN, "X," http://www.neubauten.org/supporter1/x.php [accessed October 5, 2005]. Originally we used the official lyrics, but while analyzing the text we stumbled across some lines which seem to defy a consistent interpretation. As we compared the official versions with the actual words on the recording, the most problematical lines turned out to be different, resolving the problems of consistency. Therefore, we will refer to the transcript throughout.

13 Compare "Wie Sîvrit verräten wart" and "Wie Sîvrit erslagen wart," in Das Nibelungenlied, Middle High German and translation by Karl Simrock (Berlin: Deutsche Buch-Gemeinschaft, 1965), 238–269.

14 Herrmann Henking, "Untersuchungen über die ersten Entwicklungsvorgänge in den Eiern der Insekten II," Zeitschrift für wissenschaftliche Zoologie 51.4 (1891): 685–736. Henking observed an 'element' that presumably is a chromosome pair, although he could neither recognize "a composition of two parts" nor observe a splitting of the chromosome (pair) during the "spermatogenesis," as the splitting process of semen cells was called at that time (705–6). The sign x is introduced on page 705 as an index to retrace this puzzling element, which Henking calls a "Nucleolus" (733), in picture 31b, plate XXXV. This x, however, seems to have disappeared in the printing of the plates and makes its first tangible appearance in picture 40a, plate XXXVI.
Nettie Stevens discovered the Y chromosome pair in the mealworm *tenebrio*, which "had an important story to tell, but only to someone as dedicated as Stevens, who was able to count every chromosome in its cells. Count after count confirmed her suspicions: female mealworms' cells always had twenty full-size chromosomes, whereas males had nineteen large chromosomes, and one tiny little one" (Bainbridge, 13).

"A common misconception about the X and Y chromosomes is that they were named because of their shapes... Most of the time the X and Y chromosomes are very fuzzy in appearance, and do not look like any letter of the alphabet... The X and Y chromosomes resemble their namesakes only briefly [in a transient state] – one of the most unlikely and confusing coincidences in all of science" (Bainbridge, 65–66).

The origin of x at the end of a letter can be traced back "to the use of an 'X' or cross, which was considered as good as a sworn oath in times before most people could write and therefore used the x in the same way a signature is used today: a mark of your word. An x at the end of a letter or document was often kissed as a seal of honesty, in much the same way one would kiss a bible or kiss the fingers after making the sign of the cross, thus the x came to represent a kiss in modern times" ("Hugs and Kisses," *Wikipedia* (accessed October 5, 2005) [http://en.wikipedia.org/wiki/Hugs_and_Kisses]).


Here, x is an icon for scissors, and therefore a symbol for cutting. Of course, apple and x are symbolic as computer shortcuts as well. We also have to take into account that x as scissors could be a later etymologization of the simple fact that x, c, and v are placed next to one another on a computer keyboard, and close to the apple- or control-keys.

Cajori, 1:381. Descartes used the first letters of the alphabet for known quantities, and the last letters for unknown.


See "fertig," in *Duden Deutsches Universalwörterbuch*, 534.
