'A River Runs Through it':

How the discourse metaphor *crossing the Rubicon* structured the debate about human embryonic stem cells in Germany and (not) the UK

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Abstract

In 2001 the metaphor of 'crossing the Rubicon' and many variations on this theme ran through the German debate about research using human embryonic stem cells. This article studies how the Rubicon metaphor was argumentatively exploited after having been prominently used by President Rau in a speech *Wird alles gut?* – *Für einen Fortschritt nach menschlichem Maß* (Will everything turn out well? For progress befitting humanity). From then on, it was adapted and changed by various participants to support or reject arguments for or against the use of embryonic stem cells in biomedical research. Compared to Germany, the Rubicon metaphor had much less of a 'life' in the UK and this article will try to show why that should have been the case. The contextual analysis of the Rubicon metaphor continues research into the discursive and cultural aspects of metaphors, by describing how a metaphor emerged as part of a political/social/rhetorical process, how it resonated within society and culture (or not), how it was evaluated in discourse and how it was creatively reformulated, extended and transformed by various actors engaged in political arguments. Studying the diverse meanings that emerged from the use of the Rubicon metaphor in Germany contributes to the study of discourse metaphors but also to the semasiology of metaphors, especially their polysemy, variability and flexibility.

Im Jahre 2001 dominierte die Metapher 'den Rubikon überqueren' in vielen Varianten die Debatte um menschliche embryonale Stammzellen in Deutschland. In diesem Artikel soll gezeigt werden, wie diese Metapher argumentative verwendet wurde, nachdem sie von Bundespräsident Rau prominent in einer Rede, Wird alles gut? – Für einen Fortschritt nach menschlichem Maß, gebraucht worden war. Nach dieser Rede wurde diese Metapher von Befürwortern und Gegnern in ihren Argumenten für oder gegen den Gebrauch von embryonalen Stammzellen in der medizinischen Forschung benutzt. Im Vergleich zu Deutschland wurde die Rubikonmetapher in Großbritannien viel weniger verwendet und der Artikel wird versuchen herauszufinden, warum dies der Fall war. Die Analyse des diskursiven Gebrauchs der Rubikonmetapher setzt einen Forschungsansatz fort, der versucht, Metaphern nicht nur als kognitive, sondern auch als soziale und kulturelle Phänomene zu erforschen. Es wird versucht zu zeigen, wie Diskursmetaphern dieser Art im politischen, sozialen und rhetorischen Prozess hervorgebracht und diskursiv eingesetzt werden und wie sie kreativ in politischen Argumenten verändert und reformuliert werden. Die Analyse der verschiedenen Bedeutungen, die dieser Metapher in Deutschland gegeben wurden, trägt zur Erforschung von Diskursmetaphern bei, aber auch zur Semasiologie der Metaphern, insbesondere ihrer Vieldeutigkeit, Variabilität und Flexibilität.

1. Introduction

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This article continues a line of thought that emerged from writing two other articles for *metaphorik.de*, one devoted to the metaphors and images used during the 2001 outbreak of foot and mouth disease in the UK (Nerlich et al. 2002), the other to an in-depth study of the metaphor 'silent spring' made popular by Rachel Carson's environmental best-seller *Silent Spring* (Nerlich 2003). In the paper on foot and mouth narratives and imagery we wanted to go beyond the single-sentence analysis method, which still prevails in cognitive linguistics,

¹ See the 1976 book by Norman Maclean *A River runs through* it, turned into a film by Robert Redford in 1992, based on the extended metaphor LIFE IS A RIVER.

and focused instead on metaphors as part of stereotypical narratives and as used in the context of wider semantic, visual and historical fields of imagery. We argued that metaphors are not only cognitive but also cultural and social phenomena; they can tap into a nation's cultural imagination; they can reinforce cultural stereotypes; they can naturalise social representations and they can shape social policy. In the silent-spring article I made a plea for a new approach to metaphor, the ecological study of metaphor, which would focus on how metaphors interact with their environments of use and their users and how metaphors are adapted and changed through this interaction.

In a collaborative chapter, Jörg Zinken, Iina Hellsten and I have tried to sketch out a new field for cognitive linguistics, the study of what we call 'discourse metaphors' (Zinken et al. in press), to which some of the foot-and-mouth metaphors and the silent-spring metaphor belong. Such discourse metaphors, we claim, are relatively stable metaphorical mappings that function as key framing devices within a particular discourse over a certain period of time. They are conceptually grounded but their meaning is also shaped by their use at a given time and in the context of a debate about a certain topic. The source concepts of discourse metaphors refer to phenomenologically salient real or fictitious objects that are part of interactional space (i.e., can be pointed at, like MACHINES or HOUSES or, indeed, RIVERS) and/or occupy an important place in cultural imagination (as rivers do); and, conversely, discourse metaphors themselves highlight salient aspects of a socially, culturally or politically relevant topic. We suggest that sociocultural situatedness is a crucial factor in the functioning and dynamics of metaphors. Metaphors do not appear from nowhere. They are not autopoietic, but evolve over time under certain contextual circumstances. We claim that this dynamic quality is shared by conceptual and discourse metaphors. They differ from each other only in degree, with discourse metaphors being more contextually sensitive and variable than conceptual metaphors which seem to be more stable over time and across cultures.

In this article I want to focus on a particular discourse metaphor, the metaphor *crossing the Rubicon*, which was used abundantly in the German discourse surrounding the use of human embryonic stem cells (ES cells) for medical research, but was, as we shall see, much less used in British discourse, for various political and cultural reasons. The article explores how this metaphor emerged in the social/political/rhetorical process, how it was evaluated (accepted, rejected) by commentators, and, most crucially how, in the discursive media process, it was

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² Which, by the way, is a staple example used in formal semantics, at least since Frege.

creatively reformulated, reshaped, transformed and extended in various argumentative and collocational contexts, according to cultural and experiential knowledge of rivers in general and knowledge of the status of the Rubicon river in European history in particular. The article tries to tease out the various senses that this one metaphor developed over time in context and in use to show and how a rather stale metaphor, 'crossing the Rubicon', became, at least for the time being and in one nation, a vibrant discourse metaphor. The article therefore has a pragmatic and semasiological perspective and links up with various other research interests, namely the cultural study of science and technology, applied and critical metaphor analysis, pragmatics, the study of polysemy in language use and historical linguistics.

Inside historical linguistics one normally distinguishes between two approaches to the study of lexemes: the *semasiological* approach and the *onomasiological* approach (see Geeraerts 1997; Jäkel 2003; Traugott 2005). The semasiological approach has the lexeme as its starting-point and typically asks the question: 'Given lexeme L, what meanings does it express?'. The onomasiological approach starts from the content side and typically asks the question: 'Given concept C, what lexical items can it be expressed with?'. For this study the main question is: Given the metaphor *Crossing the Rubicon* (and its most prototypical meaning: 'crossing the point of no return'), what meanings did it express in various discourses over time? However, as metaphors, just like lexemes, have not only a semasiological, but also a pragmatic dimension, another question must also be asked: How is this metaphor grounded in history and culture? What arguments did it support or undermine? As Jacob Mey has pointed out in his introduction to pragmatics, over and above the question

[w]hat does a particular metaphor express, and how, there is [...] another question that needs to be asked: How felicitous is a particular metaphor in a particular context (e.g., solving a problem, obtaining consensus, elucidating a difficult subject matter, and so on)? (Mey 2001: 62)

This is a question asked by a discursive or pragmatic approach to metaphor. In our case, the Rubicon metaphor seems to have been extremely felicitous in the context of the German ES cell debate to elucidate a difficult ethical problem. It did, however, not automatically create consensus but was contested and questioned and it was much less felicitous in UK discourse.

To study the Rubicon metaphor semasiologically and discursively or pragmatically, I explored two corpora. For the German debate I examined the use of this metaphor in articles published in two quality newspapers, the *Frankfurter Rundschau* and the *Süddeutsche Zeitung* in 2001 (supplied generously by Martin Döring) and I also searched the web for uses of the Rubicon metaphor between 2001 and 2004. For the debate in the UK I used *Lexis Nexis* to

examine the *whole* of the UK press coverage for 2001 (which yielded only very few results), as well as websites for an extended period between 2001 and 2004 (which yielded mainly American results).

Before we can get stuck into the metaphorical analysis, it is necessary to provide some background knowledge about the debates surrounding human ES cells in Germany and the UK. In the sections following this overview of the debate in both countries, I shall try to reveal the origins of the Rubicon metaphor and show how it is embodied and at the same time embedded in a network of conceptual metaphors and historical knowledge. This will be followed by a detailed study of how the metaphor emerged in Germany and was used in various ways by those debating the use of human ES cells. A short section will reveal why the Rubicon metaphor was not exploited in a similar way in the UK. In the conclusion I shall try to show what the detailed analysis of the use of one metaphor in its social and political context can contribute to a new and broader study of metaphor.

2. The ES cell debate in Germany and the UK – historical background

"1998 saw the publication of two papers describing the growth *in vitro* of human embryonic stem (ES) cells derived either from the inner cell mass (ICM) of the early blastocyst or the primitive gonadal regions of early aborted fetuses." (Alison et al. 2002) Scientists soon realised that ES cells might have huge potential in the field of tissue engineering and regenerative medicine as they hold the capacity to produce every type of cell and tissue in the body. In theory, they could revolutionise the treatment of cardiovascular disease, neurodegenerative diseases, such as Alzheimer's and Parkinson's, cancer, and diabetes. Over the last six years stem cell biology has evolved rapidly and continues to do so, alongside a debate about the ethical problems associated with material derived from human embryos.

This debate intensified in Europe between the end of 2000 and the beginning of 2001, after the then UK Chief Scientist Sir Liam Donaldson (Donaldson 2000) published his report *Stem Cell Research: Medical Progress with Responsibility* in August 2000 and recommended that stem cell research should be permitted in the UK, including research on human embryos, subject to strict legal controls and ethical considerations (see Döring/Nerlich 2004).

Subsequently, the UK Government drafted regulations to turn the recommendations of the Donaldson report into law but allowed Members of Parliament a free vote (not determined by party membership). The Human Fertilisation and Embryology (Research Purposes) Regulations were debated and passed by the House of Commons on 19 December 2000 and

the House of Lords on 22 January 2001.³ More recently, in August 2004, scientists based at Newcastle's Centre for Life were granted permission to carry out pioneering research to create stem cells from unfertilized human eggs, and in February 2005 the Human Fertilisation and Embryology Authority (HFEA) granted a licence to the Roslin Institute in Edinburgh (where Dolly the sheep had been created) to create stem cells from embryos produced by cell nuclear replacement to study Motor Neuron Disease. In the UK ES cell research has never aroused the frenzied debate it did in the United States or indeed in the rest of Europe.

In contrast with the UK, stem cells are a very contested issue in Germany. Comparable to Nisbet et al.'s (2003) findings, one can say that the media attention for this issue increased significantly during the decoding of the human genome and its presentation in the media, from the year 2000 onwards – a time when 'designer babies' and preimplantation genetic diagnosis (PGD) also attracted headlines (see Nerlich et al. 2003). Media debates about the decoding of the human genome seem to have broadened and intensified the discourse on biotechnology in general and ES cells in particular. Almost every German newspaper – and especially the Frankfurter Allgemeine Zeitung – covered the topic extensively, tapping into a longstanding debate about biomedical issues that was partially framed by a philosophical dispute (completely absent in the UK), which arose between the philosophers and intellectuals Peter Sloterdijk and Jürgen Habermas, after Sloterdijk published a book entitled Regeln für den Menschenpark (Rules for a human zoo) (Sloterdijk 1999). The dispute focused on the role of biotechnology in determining the future of humanity: Sloterdijk put forward a deterministic understanding of biotechnology that – in his own words – supersedes humanism as an ancient form of education. His claim was that the way in which biotechnology would be able to modify human nature would make cultural adaptation – understood as humanism – useless.

At the same time, in March 1999, the German research foundation (Deutsche Forschungsgemeinschaft 1999) published a statement on the topic of ES cell research. The statement said that ES cell research, "regardless of whether they [ES cells] were generated by in vitro fertilisation or somatic nuclear transfer should not be supported [...]" (Heinemann/Honnefelder 2002: 532) by the research foundation. This declaration was in accordance with the German Embryo Protection Act that bans any manipulation of human embryos and their human dignity (article 1 of the German Basic Law; *Deutsches Grundgesetz*) unless this manipulation is aimed at their preservation. However, the statement

³See http://www.publications.doh.gov.uk/cmo/progress/stemcellresearch/stemcellprogress.htm; accessed March, 2005.

by the German research foundation violated the right of freedom of research (article 5, paragraph 3 of the German basic law) as also enshrined in German Basic Law. And finally, article 2, paragraph 2 guarantees the right to life and the inviolability of the person – a paragraph that was and is used by those arguing for and against ES cell research.

During that time a researcher from Bonn, Oliver Brüstle, submitted a research proposal to the German research foundation for a project involving imported human ES cells. His project mainly aimed at discovering potential therapeutic strategies that may – if successful – contribute to healing neurological diseases such as multiple sclerosis or Parkinson's disease. This grant application gained iconic status in the public debate about biotechnology and ES cell research, which was intensifying at that time. The debate heated up further after a revised statement was issued by the German Science Foundation in May 2001 (Deutsche Forschungsgemeinschaft 2001), the same month that President Rau gave his important speech, in which he prominently used the Rubicon metaphor, to which we will come in the next section. It should be stressed that Rau was not the first to use the metaphor of crossing the Rubicon in a debate about stem cells, but he established it as a discursive 'hit metaphor' (Geisler 2001) by endorsing it as a politician.

The second statement by the German Science Foundation emphasised that the German embryo act only applies to embryos and totipotent, but not to pluripotent cells. Therefore, no restrictions exist in Germany and Brüstle's application should be allowed – but the German research foundation waited because Brüstle had become publicly known as the Dr. Frankenstein of biotechnology. Meanwhile, in March 2001, the German Parliament set up a commission on Law and Ethics in Modern Medicine (Enquete Kommission 'Ethik und Recht in der Modernen Medizin') in which 13 members of parliament and 13 experts belonging to different scientific disciplines reported in November 2001 on the issue of stem cells. This report (Deutscher Bundestag 2001) concluded "that lowering the standards of protection for embryonic life cannot be justified and recommended not to allow the generation of embryonic stem cell lines from human embryos in Germany" (Heinemann/Honnefelder 2002: 534). This report was complemented and partially revised by a second body, the National Ethics Council (Nationaler Ethikrat) – established in May 2001 – that delivered its report in December 2001 (Nationaler Ethikrat 2001) in which the members recommended an in-principle ban with restricted exceptions. In April 2002, the stem cell act was passed by the majority of Parliament, largely following the recommendations of the National Ethics Council.

The ethical background of the ES cell ruling is based on the fact that the dignity of human ES cells is guaranteed by the German Basic Law, but that in current legal thinking pluripotent stem cell lines are not understood as embryos or as totipotent. Nevertheless, the import of such stem cells may lead to the unacceptable destruction of human life for scientific purposes in Germany and is therefore prohibited. To avoid this, the present ban only concerns stem cell lines that will be generated in the future but the ban does not apply to existing cell lines that were generated before January 1, 2002 – the date set by the act. The logic behind this act is that ES cell lines that were derived before January 1, 2002 have to be considered as not having been started or backed by a German scientist.

However, this ruling did not calm the heated disputes because it avoided the definition of human dignity and the attribution of personal values to the embryo. Thus, the fundamental question remained as to whether the use of human life by humans could be justified and how the moral status of the ES cells, the embryo or the foetus at an early stage should be defined. The participants in the debate seem, for the moment, to have run out of words that provide an accurate semantics for the ever-widening field of bioethics.

Whereas the metaphors used in the UK debate about stem cells were relatively conventional and positive and never really seemed to change, the metaphorical landscape in Germany underwent quite a seismic shift after the prominent use of one seminal metaphor which acted as what one could call a 'strange attractor' for a metaphorically framed debate about bioethics and biopolitics.

The crossing the Rubicon metaphor made its most famous appearance on May 18, 2001 in the speech by a politician – the then German president Johannes Rau, entitled Wird alles gut? – Für einen Fortschritt nach menschlichem Maβ (Will everything turn out well? – For progress befitting humanity; see: Rau 2001). However, unlike President Clinton, who had used another metaphor, the map metaphor, quite successfully to sell the human genome to the public in the year 2000, Rau did not use the metaphor to attempt to sell a new biotechnological advance, but instead to urge scientists and the public to be cautious about the possibly unethical use of a scientific advance, the use of human ES cells to find cures for various degenerative diseases, such as Alzheimer's, Parkinson's, diabetes, and so on. He urged them to consider what research they could do with adult stem cells for example, by saying that there is still a lot of scope for research 'dieseits des Rubikon' – on this side of the Rubicon – and that we don't have to cross it and enter ethically dangerous terrain.

It should be stressed that Rau did NOT use the whole of the Rubicon metaphor (*crossing the Rubicon*), but only alluded to it by referring to part of the cognitive and geographical terrain it mentally and metaphorically delineates: the boundary between the known and the unknown, the safe and the unsafe, the conquered and the unconquered. The Rubicon that maps out the two sides of, in our case, scientific progress (see section 3 for more information) can perhaps be regarded as an 'idealised cognitive model' or ICM. And if we regard metonymic mappings as either building upon the relationship between an ICM as a whole and its part(s) or the relationship between parts of an ICM (see Radden/Kövecses 1999), then, evoking the metaphor and/or ICM *crossing the Rubicon* by saying "dieseits des Rubicon" (this side of the Rubicon) can be regarded as a metonymic mapping.

This metonymically based allusion to the Rubicon metaphor as a whole was itself mapped against a background of other conceptual metaphors, such as SCIENCE IS A JOURNEY or SCIENCE IS PROGRESS, which we shall explore in the following section. In his famous speech Rau asked, amongst others:

But is it not a contradiction to speak of progress and limits at the same time? "Thinking means venturing beyond" that was the motto of Ernst Bloch, the great German philosopher of hope. Yes: thinking – researching, knowing, discovering – that means venturing beyond.

But we also know that every time limits are crossed we are exposed to new ones: the limit of the discovery, the limit of what people can do, the limit of what we can justify. We need yardsticks here to help us differentiate between what we may and may not do. We have to ask ourselves the seemingly simple question: what is good for mankind? [...]

I am firmly convinced that we could do an unbelievable amount of good without science and research having to enter ethically dubious fields. There is much scope this side of the Rubicon. (Rau 2001, online, italics added)

Let us now explore how Rau's speech and its allusion to the Rubicon metaphor drew on a network of conceptual and historical associations to try and achieve its rhetorical aim or target: to put some ethical breaks on the unlimited forward march of scientific 'progress' and to urge scientists and policy makers not 'to cross the Rubicon'.

3. Of journeys, maps and rivers: The cognitive and historical sources of a discourse metaphor

When the human genome was published in various stages between 2000 and 2003 the map metaphor was one of the most important ones used to sell its economic and medical potential to the public, alongside the book/language and the blueprint/recipe metaphors (see Nerlich/Hellsten 2004). This metaphor became especially popular after the former US

metaphorik.de 08/2005 - Nerlich, Crossing the Rubicon in the debate about stem cells

President Bill Clinton used it in his famous speech in the White House in June 2000 (see Nerlich et al. 2002; Döring in press) and proclaimed: "Without a doubt, this is the most important, most *wondrous map* ever produced by humankind. [...] Today, we are learning the language in which God created life." (Clinton 2000)

Used metaphorically in the debate about the new genetics and genomics, both the map and the book (of life) (see Kay 2000; Hellsten in press) stand for 'hidden codes' that wait to be deciphered and which, once deciphered, can lead those who can read the book or the map to hidden treasures, to gold, riches, to unknown lands, to 'the holy grail' of science – a metaphor prominent in scientific discourse and frequently used when talking about scientific discoveries. The map metaphor in particular is linked to a metaphor that is all-pervasive in scientific discourses and in the discourses of those trying to 'sell' scientific advances to the public, namely:

SCIENCE IS A JOURNEY

This conceptual metaphor can be reformulated and made more specific as:

SCIENCE IS A VOYAGE OF DISCOVERY

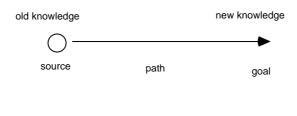
SCIENCE IS AN EXPEDITION

SCIENCE IS A QUEST

SCIENCE IS A CONQUEST

SCIENCE IS A CRUSADE

All these metaphors rely on the source-path-goal image schema, as illustrated in Figure 1 (see also Nerlich/Dingwall 2003). In this way the SCIENCE IS A JOURNEY metaphor is grounded in human experience and therefore 'embodied'. Lakoff and Johnson (1980, 1997), Grady (1997) and others have suggested that all conceptual metaphors must be grounded either in an overlap of experience between the two domains of a mapping or through the unification of primary metaphors which are themselves experientially grounded. According to Grady (1997) primary metaphors are tight conceptual pairings that arise directly from experience. For example, linguistic expressions like 'burdened by grief' 'heavy work load' etc. reflect the primary conceptual metaphor DIFFICULTIES ARE BURDENS, which links physical judgement of weight with subjective experiences such as discomfort, strain and effortfulness.



SCIENCE IS A JOURNEY

Figure 1: The conceptual metaphor SCIENCE IS A JOURNEY and its origins in the source-pathgoal image schema

As the experience of journeying typically involves a forward motion, the gaining of new knowledge during a metaphorical journey of discovery is in general regarded as 'progress' or an 'advance' (and as worth the effort), which means that the journey metaphor is given a positive perspective and the aim or endpoint of the journey is regarded as 'good'. These positive connotations of the conceptual metaphor SCIENCE IS A JOURNEY are themselves not only rooted in our bodily experience of journeying, but also in a progressive view of science which emerged in the 19th century at the height of the industrial revolution; that is to say, they are not only experientially, but also historically or culturally grounded. Although this metaphor pervaded discourses about the human genome (and, in the UK, about ES cells), some commentators put forward more cautious interpretations of the SCIENCE IS A JOURNEY metaphor (Jenkins 2001; Annas 2001) and warned science not to overstep certain ethical boundaries. This more nuanced and negative perspective was historically influenced by knowledge of the 'excesses' of science, especially 'eugenics', witnessed in the 20th century and which challenged 19th-century progressive ideology. However, in general, when reporting on the new genetics and genomics the focus was on science's assumed telos: to overcome boundaries, reach new frontiers, conquer the unknown and make 'breakthroughs' on its journey of discovery for the benefit of mankind – a view that itself has been with us since the enlightenment and the conquest of 'new worlds' (which had been the root of Clinton's map metaphor which he had linked to the map of America's western frontier).

Hence, whereas the argument that science should reach for new frontiers and overcome obstacles is grounded in the conceptual metaphor SCIENCE IS PROGRESS, arguments against science overstepping (scientific or ethical) boundaries tap into the myth of Frankenstein, on the one hand, that emerged during the 19th century after the publication of *Frankenstein* (Shelley 1971 [1818]) and, historical knowledge of science turned 'evil', associated with

images of the atomic bomb and eugenics for example. The same conceptual metaphor (SCIENCE IS A JOURNEY) can therefore develop quite different meanings when associated with the other conceptual metaphor SCIENCE IS PROGRESS or with pertinent historical knowledge about science. In this way the same metaphor can be used to frame two different types of discourse: the discourse of *hope* and the discourse of *fear* (see Durant et al. 1996). For discourses around biomedicine this means that advances can either be framed as leading to new cures for diseases or as leading science astray. In the course of the German stem cell debate these two possible outcomes of stem cell research were pictured as lying on the other side of a river that should either be crossed or not be crossed.

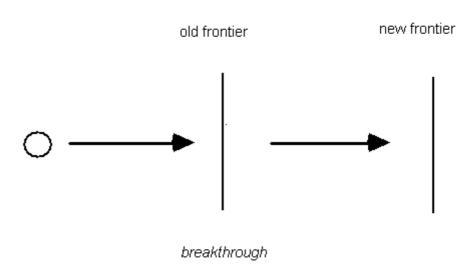


Figure 2: Science as overcoming limits

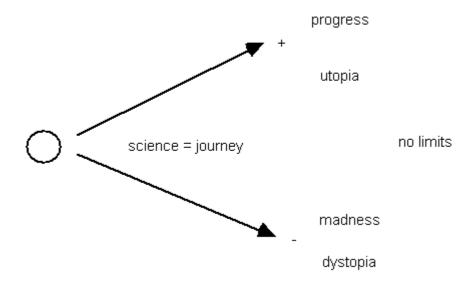


Figure 3: The journey of science has no limits

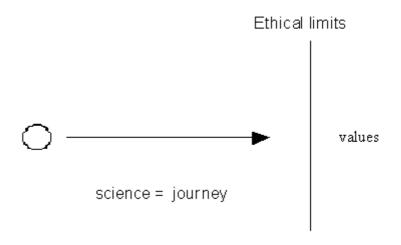


Figure 4: The journey of science has ethical limits

In some ways the Rubicon metaphor (used metonymically by Rau, see end of section 2) maps perfectly onto the last figure we have seen (figure 4), namely onto its vertical line – the limits set by ethics – and fits in neatly with the map metaphor itself, as a river is geographical feature on a map and separates two parts of mapped landscape. It also resonates with other geographical metaphors and clichés used over and over again in debates about biotechnology,

such as crossing a line, crossing a border, going beyond certain limits, or going down the slippery slope (see Nerlich et al. 2003).

However, unlike the *crossing a line* cliché, the Rubicon metaphor affords more scope for argumentative adaptation and shaping, as a river, with its many cultural connotations (the river of time; the river of life; the river separating life and death and so on) has more metaphorical potential and cultural resonance than a mere line. The Rubicon river in particular has an historical aura that can be contested or exploited. It is also linked, as we shall see in the quotes below, to other clichés, such as 'the die is cast' or 'reaching a point of no return'.

The dictionary meaning of *crossing the Rubicon* is given by the *Oxford English Dictionary* (online edition) as: 'to take a decisive or final step, *esp*. at the outset of some undertaking or enterprise'. The most prototypical meaning, however, seems to be: 'crossing the point of no return'.

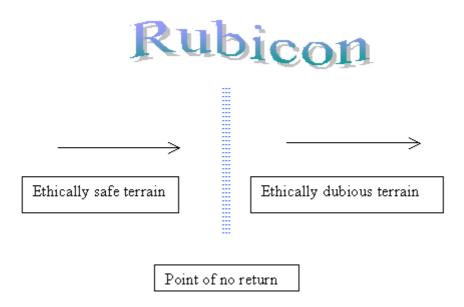


Figure 5: The Rubicon metaphor maps onto the image-schematically based metaphor of the limitations of science

In an article entitled "Das Springspiel über den Rubikon" (Playing a jumping game over the Rubicon), one commentator, writing for the *Frankfurter Rundschau*, highlighted the link between the river and the map metaphor in the following way (and linking it to other sayings, such as 'reaching the promised land' and 'terra incognita'):

Es geht leitmotivisch um Grenzen und um Grenzflüsse, um den Rubikon, der, je nach Perspektive, nicht überschritten werden darf oder längst überschritten worden ist. Das Feld der gentechnischen Möglichkeiten und ihre moralische Folgeabwägung ist deshalb "terra incognita", die die einen zu betreten abraten, während die anderen im festen Glauben, sie "bestellen" zu können, in ihr das gelobte Land sehen. (We are dealing with the leitmotif of boundaries and boundary rivers, that is, the Rubicon, which, depending on your perspective, should not be transgressed or has long been transgressed. The field of possibility for gene-technology and concomitant reflections on its consequences is therefore a "terra incognita", which, according to some, you should not set foot on, whereas others, having complete faith that they will be able to "cultivate" it, see in it the promised land.)⁴ (FR, 23/03/01)

To explain why the Rubicon metaphor became so popular in Germany and established itself as a discourse metaphor, it might be helpful to see where it comes from. In 49 BC Julius Caesar crossed a river in northern Italy called the Rubicon, which was at the time the frontier between Italy and the Roman province of Gallia Cisalpina. Although the river has changed its course since Antiquity it is normally equated with the Rubicon, formerly known as Fiumicino. The crossing of this small stream in Italy became one of ancient history's most pivotal events. From it sprang the Roman Empire and, to some extent, modern European culture.

It was January 49 BC, Caesar was staying in the northern Italian city of Ravenna and he had a decision to make. [...] An ancient Roman law forbade any general from crossing the Rubicon River and entering Italy proper with a standing army. To do so was treason. This tiny stream would reveal Caesar's intentions and mark the point of no return. ("Julius Caesar Crosses the Rubicon, 49 BC", 2002, online italics added)

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⁴ All translations are by Brigitte Nerlich.



Figure 6: Map of Italy with Rubicon river

According to Suetonius (Julius Caesar 31-32)

Caesar overtook his advanced guard at the river Rubicon, which formed the frontier between Gaul and Italy. Well aware how critical a decision confronted him, he turned to his staff, remarking: 'We may still draw back: but, once across that little bridge, we shall have to fight it out.' As he stood, in two minds, an apparition of superhuman size and beauty was seen sitting on the river bank playing a reed pipe. A party of shepherds gathered around to listen and, when some of Caesar's men, including some of the trumpeters, broke ranks to do the same, the apparition snatched a trumpet from one of them, ran down to the river, blew a thunderous blast, and crossed over. Caesar exclaimed: 'Let us accept this as a sign from the Gods, and follow where they beckon, in vengeance on our double-dealing enemies. *The die is cast*.' (Italics added)⁵

In this tale one can find associations between the Rubicon and strategic decision making (to allow research based on ES cells or not), but also between the Rubicon and the 'lure' of a 'vision' (the vision of curing all sorts of degenerative diseases through ES research). As one can see, the discourse metaphor of *crossing the Rubicon* resonates superficially and publicly with many well-known clichés (such as reaching a point of no return; the die is cast), but it also resonates with deeper historical layers of understanding that might not be publicly available but might be used rhetorically if needed.

⁵ See: http://www.vroma.org/~bmcmanus/rubicon.html, accessed July, 2004.

4. Germany: the Rubicon metaphor becomes a discursive reservoir

For this part of the analysis I have focused on 20 articles using the Rubicon metaphor, published in 2001 in the *Frankfurter Rundschau* (FR) and the *Süddeutsche Zeitung* (SZ); 10 articles each in each newspaper (plus some web pages). The average length of the articles I examined was about five pages, much longer than articles which appeared on the topic of stem cells in British newspapers. Most of the articles used the Rubicon metaphor after Rau had launched it as the 'hit metaphor' of biotechnology, as one commentator, Linus Geisler, called it (FR, 18/08/01). Geisler himself wrote two articles for the FR, one of them a lengthy essay on metaphors used in the new genetics, "Herren der Metaphern" (Masters of metaphor) (FR, 18/08/01; see also Geisler 2001). Another article by Geisler was the only one in the corpus in which the Rubicon metaphor was used before Rau made it popular and opened up the discursive flood gates.

Geisler employed it in the context of discussing the distinction between therapeutic and reproductive cloning (FR, 19/02/01). He pointed out that the Rubicon separating one from the other is not located in the method, but in ethical scruples, which, eventually will trickle away (*versickern*) – the image of the Rubicon drying up would be used again, as we shall see later. He also quoted Johannes C. Huber, a Viennese reproductive technology specialist, as saying that the development of brain tissue in the embryo is recognised as 'the neuronal Rubicon of individuality' in stem cell research. There is also one article, published in the SZ in November 2001 that does not refer to Rau's Rubicon metaphor, but uses it with reference to American advances in embryo cloning. All the other articles, analysed in the following, refer either directly to Rau's metaphor and/or develop it further.

The debate in Germany, fuelled by the publication of the Donaldson report in the UK, exploded after a clash between Rau, who urged caution by saying

I am firmly convinced that we could do an unbelievable amount of *good* without science and research having *to enter ethically dubious fields. There is much scope this side of the Rubicon.* (see Rau 2001, italics added)

and the German Science Foundation and its president Ernst-Ludwig Winnacker, who claimed that the Rubicon had already been transgressed because of IVF, abortion and progress made in PGD (this was a view also taken by Chancellor Gerhard Schröder who had convened the National Ethics Committee to debate the matter of ES cells). The link between PGD and stem cell research was the particular focus of some of the coverage in the SZ. Another important clash occurred between Rau (President of the Federal Republic) and Wolfgang Clement

(Ministerial President of North Rhine Westfalia), who proclaimed that there was no Rubicon and who defended the research proposed by Oliver Brüstle. And finally, one more intervention was seminal in the Rubicon/stem cell debate in Germany, one made by Hubert Markl, president of the Max-Planck-Gesellschaft, in a speech before the senate of this august society and published in full by the SZ on 25 June, 2001 under the title: "Rom liegt jenseits des Rubikon (Rome lies beyond the Rubicon): 'Menschsein' ist kulturell, nicht biologisch definiert. Ein Plädoyer für die Freiheit – und die Embryonenforschung" ('Being human' is culturally and not only biologically defined. A plea for freedom and for embryo research) – and we shall come back to this important article later.

After Rau had launched the Rubicon metaphor in May 2001 onto its discursive path, this metaphor seems to have taken on a life of its own in Germany and was adapted to new ecologies of contested social, cultural and bioethical values, political and economic interests and historically framed ideologies.

Many articles published in the FR and the SZ make a rather conventional use of the Rubicon metaphor, focussing mainly on its standard meaning, given by the OED as 'to take a decisive or final step, *esp*. at the outset of some undertaking or enterprise' (see above). Some focused on a meaning connected to this one through a shift in perspective from 'starting point' to 'trajectory', that is, focussing not on the initial step and its decisiveness but on the inevitability of what happens after this initial step has been taken. This meaning of *crossing the Rubicon* is given by *Encarta* as the central one, namely: "point of no return: a point at which any action taken commits the person taking it to a further particular course of action that cannot be avoided". One can, for example, find expressions, such as: 'the Rubicon has already (really, in fact, irrevocably, etc.) been transgressed because of IVF (abortion, PGD, etc.)' – 'one more step doesn't make a difference' –'we didn't know what to expect beyond the Rubicon, but we have already transgressed it'.

However, there were other uses of the metaphor that did not only extend it in conventional ways (following a well signposted semantic path), but questioned it or modulated it on the basis of encyclopaedic knowledge and experience connected not only with the ancient river itself, but also with modern ways of acting upon or dealing with rivers, riverbeds and riverbanks. In the following I shall look at how the Rubicon metaphor was used by linking it

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⁶ See: http://encarta.msn.com/dictionary 1861706410/Rubicon.html, accessed July, 2004.

to its historical context, by blending it with other metaphors and by exploring various natural, technological and cultural aspects of rivers.

4.1 Back to the historical source of the Rubicon metaphor

There are obviously some examples where the metaphor is put in its historical context (but, it seems, more in later contributions to the debate rather than in 2000/2001). On the one hand one can focus on Caesar's 'transgression' and on the other hand one can focus on the result of this act, namely achieving a victory.

Es bleibt also dabei, dass mit dem neuen Embryonenforschungsgesetz die Grenze ethischer Verantwortbarkeit so überschritten ist wie seinerzeit Cäsar den Rubikon überschritten hat. Aus ethischer Sicht muss deshalb dieser Entwurf insgesamt zurückgewiesen werden. (So it will remain the case that the new law regarding embryo research transgresses limits of ethical responsibility in just the same way as Caesar once crossed as the Rubikon. From an ethical point of view this draft should therefore be rejected.) (Koch [Bishop] 2003)

Der ehemalige CDU-General [Peter Hintze, BN] erinnerte an Cäsar, der einst den Fluss überschritt – und siegte. (The former CDU-general reminded us that Caesar who once crossed the river actually did win a victory.) (Dausend 2004)

In saying this, Peter Hintze tried to reverse the usual inferences associated with the Rubicon as a river or point of no return that should not be crossed and argued that crossing it could lead to progress in biotechnology and medicine and to victory over diseases. This link between the Rubicon metaphor and other conceptual metaphors, such as SCIENCE IS PROGRESS, and other discourse metaphors, such as 'the breach in the dike' metaphor often used to discuss the transgression of ethical or scientific boundaries, became even more apparent in other contributions to the debate. Both the Rubicon and the dike metaphor are part of the debate about 'contested ethical geographies' (Martin Döring, p.c.).

4.2 The Rubicon runs into other metaphors

The most explicit link between the Rubicon metaphor and another metaphor, in this case the conceptual metaphor SCIENCE IS PROGRESS, was made by Geisler when he wrote in the FR (18/08/01):

Rubikon, dieses, was Namen und Verlauf anbetrifft, ungewisse Flüsschen (vielleicht war es der frühere Fiumicino) zwischen Heil und Unheil, auf dessen anderer Seite der magische Magnet der Fortschrittssehnsucht zu immer wiederkehrender Überschreitung anzieht. Ein frustranes Unterfangen, wie die Erfahrung lehrt, denn hinter dem Rubikon ist immer auch vor dem Rubikon. [...] (Rubicon, this rivulet of uncertain name and course (perhaps it was the former

Fiumicino), running between good and evil, on the other side of which the magical magnet of yearning for progress attracts for ever those who transgress it over and over again. This is a frustrating enterprise, as we know from experience, as beyond the Rubicon is forever also in front of the Rubicon.) [...]

Wer den Rubikon im Rücken hat, braucht sich nicht mehr in nostalgischer Anwandlung umzudrehen, denn von nun an gilt nur noch das absolute "Vorwärts!" (Those who have the Rubicon behind them don't need to turn back nostalgically, as from now on only one thing counts, the absolute 'Forward march!')

Here the warning is given that once you have the Rubicon behind you, the only option is to go forth into the unknown without any nostalgic sentimentality – you say 'Forward', just like Caesar might have told his troops when he strode across the real Rubicon; and after that, there is no looking back.

Another commentator linked the Rubicon metaphor (in particular the variant that focuses on the dried up river bed, see below) not to another conceptual, but to another discourse metaphor, popular in German discourse about bioethics (see Döring in press), namely the metaphor of the dike breaking:

Der Damm sei längst durchbrochen, erwidert die Gegenseite und verweist auf künstliche Befruchtung, Abtreibung und Nidationshemmer. Was sollte der Damm schützen und vor was? Hinter dem morschen Damm und jenseits des ausgetrockneten Rubikon jedenfalls zeichnen sich die Umrisse einer neuen Biopolitik ab. (The dike has already been breached long ago, counter the adversaries and refer to IVF, abortion and nidation inhibitors. But what was the dike supposed to protect and against what? Of one thing we can be sure: behind the rotting dike and beyond the dried out Rubicon one can make out the contours of a new biopolitics. (FR, 28/05/01)

The argument is that just as the dike or dam holding back biomedical advances has long been broken, so the Rubicon, marking the line biomedical advances should not cross, has now dried up. We should accept this as a fact and instead of harping on about this disappearance of boundaries, we should be working towards a new biopolitics.

In the following, I explore other uses of the Rubicon metaphor that exploit encyclopaedic knowledge of various natural, technological and cultural aspects of rivers and that modulate the standard Rubicon metaphor discursively.

4.3 Tales from the riverbank

Some users of the Rubicon metaphor focused on the shifts and changes of the river which imply shifts in the boundaries between the lands that the river separates. In reply to Rau, the president of the German Science Foundation, Winnacker, asked for example to be told more

concretely "wie diese notwendigen und unausweichlichen Grenzveränderungen transparent gemacht und im Interesse unserer Gesellschaft gehandhabt werden können" (how the necessary and inevitable boundary changes can be made transparent and can be handled in the interest of our society) (quoted in FR 18/05/01).

In the next example our knowledge of the geological action that a river exerts on the riverbed and surrounding landscape is used to stress 'inevitable' change and bioethical flexibility:

Von mehr bioethischer Flexibilität spricht es, den Flussverlauf einfach nach Belieben zu variieren. "Ach, wissen Sie, der Rubikon ist ein mäandernder Fluss." [Ministerial President of North Rhine Westfalia, Wolfgang Clement. A proponent of ES cells because of its technologic and economic potential] (There is more stress on bioethical flexibility when one talks about varying the course of the river haphazardly. "Now, you know, the Rubicon is a meandering river".) (FR, 18/08/01)

Here rivers are not seen as separating two lands rather statically, but as dynamically changing various landscapes or as opening up opportunities for change and human intervention.

In the following example experience with human river management is used to focus on manmade progress and to argue that one should get away from the good/bad dichotomy and create a new course for the river and a new riverbed.

Hubert Markl, Präsident der Max-Planck-Gesellschaft, versichert, es sei ihm ein Herzensanliegen zu verdeutlichen, dass der Rubikon kein Fluss ist, jenseits dessen das Böse lauert, sondern ein Fluss, dem der Mensch ständig ein neues Flussbett bahnen muss und der das "Vertraute vom Unerschlossenen" trennt. (Hubert Markl, President of the Max-Planck-Society, assured us that it was a matter close to his heart to make clear that the Rubicon was not a river beyond which evil lurked, but a river for which human beings must create ever new beds and which 'separated the known and familiar from the unknown and unexplored'.) (FR, 18/08/01)

This is the argument Markle made in a long speech entitled "Rom liegt jenseits des Rubicon" (Rome lies beyond the Rubicon) (SZ, 25/06/01). For Markl we are not only 'masters of metaphor' as Geisler had claimed, we are also masters of the river and with it of our own future.

Es lag mir sehr am Herzen, zu verdeutlichen, dass der Rubikon kein Fluss ist, jenseits dessen das Böse lauert; denn das Böse ist, wenn schon, dann längst immer mitten in uns. Der Rubikon ist vielmehr ein Fluss, dem der Mensch ständig selber ein neues Flussbett bahnen muss, weil er das Vertraute vom Unerschlossenen trennt, und den wir deshalb nur wohlbedacht und mit Verantwortung für unser Handeln überschreiten sollten. Aber wir sollten auch nicht vergessen: Rom liegt auch künftig jenseits des Rubikon und Caesar hat ihn erfolgreich überschritten. Denn der Mensch ist seit jeher ein Wesen, das seine Grenzen überschreiten muss, um ganz Mensch zu sein und das sich dabei dennoch immer neue Grenzen setzen

muss. (I very much wished to stress that the Rubicon is not a river across which evil lurks, as evil, if it exists, is always already with us. By contrast, the Rubicon is a river for which we humans always have to dig a new bed, because it separates that which is familiar from that which is unfamiliar and unexplored; a river, which, therefore, we should only cross after much reflection and with responsibility for our actions. However, we should not forget that even in the future Rome lies beyond the Rubicon and that Caesar crossed it successfully. Human beings are creatures that always have to go beyond their boundaries so as to stay human but who also always have to set themselves new frontiers.) (SZ, 25/06/01)

Here the Rubicon metaphor is 'embedded' on the one hand in the modern context of river management and blends with metaphors of science as progress on the other, but also links up with its historical context. This passage echoes in some ways the arguments put forward in the Donaldson report: *Stem Cell Research: Medical Progress with Responsibility*, published in August 2000.

A very different position was adopted in an article entitled "Das trockene Bett des Rubikon" (The dry bed of the Rubicon) (FR, 28/03/01). The writer asked: "Wo verläuft der Fluss, den beide hier im Munde führen, und welche Zonen trennt er?" (Where runs this river that both camps talk about and what zones does it separate?) Focusing on the river's water level (and after having quoted from both Jürgen Habermas and Bruno Latour — on foot and mouth disease and BSE!), he claims: "die Grenzen müssen verschoben, aber sie müssen zurückverlegt werden: nach oben — nicht nach unten, nach hinten — nicht nach vorne. Damit der Rubikon wieder Wasser führt." (the boundaries should be shifted, but they should be shifted backwards: up, not down, backwards, not forwards so that the Rubicon can flow again) And finally, one commentator even speculated about tunnels under the riverbed: "Der Verdacht kommt auf, dass es sogar von niemandem bemerkte Unterquerungen gab." (One gets the suspicion that there are even tunnels under the river that nobody has noticed.) (FR, 18/08/01)

The next examples shift the metaphorical focus from the bed of the river to its bank. In the first example, experience of human riverbank- and flood management is used to argue for staying on one side of the river and defending it against the incoming flood – here the dike and the river metaphors are combined.

Es bliebe gleichwohl eine Option hart am Ufer des Rubikon, die extrem sorgfältig gegen das zu erwartende Hochwasser abgesichert werden müsste. (There was still the option to stay close to the riverbank and to protect it carefully against the expected flood.) (Bauer 2001, University of Heidelberg)

In the following example, finally, knowledge of anchors is used to highlight the dangers in going beyond established embryo law:

Wir brauchen keinen starken Standort, sondern wir brauchen einen starken Standpunkt, damit aus dem, was wir als Anker des Embryonenschutzgesetzes haben, kein Treibanker wird, der uns absichtlich oder unabsichtlich über den Rubikon führt. (We don't need a strong position but we need a strong point of view so that what we have in the form of the anchor of the embryo protection act does not become a drift anchor which leads us intentionally or unintentionally across the Rubicon.) (Dr. Ernst Dieter Rossmann [SPD] 2002)

However, despite some attempts to shift away from the usual interpretation of the Rubicon metaphor, the main use of the metaphor in Germany still seems to have been to polarise debates around stem cells in the way studied by Durant et al. (see Durant et al. 1996) for GM etc., that is, to highlight either the hopes or the fears associated with this new technology (see Faulstich 2002). This can be represented schematically in the following way:

RUBICON from the point of view of those opposed to ES cell research

this side of the Rubicon	beyond the Rubicon		
ethics	economics		
good	evil		
known	unknown		
safe	unsafe		
precaution	recklessness		

this side of the Rubicon	beyond the Rubicon		
restraint	progress		
opportunity	success		
diseases	cures		
fe ar	hope		

Figure 7: Views of the Rubicon from two perspectives

These hopes and fears attached to ES cells were discussed in a more philosophical way by the philosopher Jürgen Habermas in a book entitled *On the way to a liberal eugenics?* (Habermas

2001; see also SZ, 15/09/01) – which contributed significantly to the ES cells debate in Germany (he was quoted several times in the FR and SZ corpus):

Let us suppose that, with research involving the destruction of embryos, a practice will come to prevail for which the protection of pre-personal human life is secondary to 'other ends', even if these ends should consist in no more than the prospect of developing high-ranking collective goods (eg. new treatments). The de-sensitizing of the way we look at human nature, going hand in hand with this practice becoming normalized, would prepare the way to liberal eugenics. In this, we can even today discern the future fait accompli, by then a fact of the past, which later apologists will be able to refer to as the Rubicon that was crossed. Looking at a possible future for human nature makes us aware of the present need for regulation. Normative barriers in our dealings with embryos are the result of the point of view taken by a moral community of persons that fends off the pacemakers of a self-instrumentalization of the species in order to safeguard – let us say: out of concern for itself, but in the broader perspective of an ethics of the species – its communicatively structured form of life. (Habermas 2001, online)

Here the Rubicon becomes the moral barrier between the present and the future, a barrier that prevents the present from becoming (inevitably) a past in a possible future in which humans have become means to their own ends. In an article entitled "Leben, ein Diskurs" (Life, a discourse), a commentator for the SZ wrote about the debate between Rau, Markl and Habermas (SZ, 08/08/2001):

Während zwischen Rau und Markl der Rubikon zur Leitmetapher wird – für Rau Grenze schlechthin, für Markl die cäsarische die unüberschreitbare Herausforderung –, argumentiert Habermas struktural: Voraussetzung jeder demokratischen Idee von Gerechtigkeit ist Reziprozität, die Umkehrbarkeit sozialer Beziehungen. Wenn der zukünftige Mensch nicht mehr ein "Gewordener", sondern ein "Gemachter", gentechnisch Fixierter ist, dann ist diese Grenze der Reziprozität überschritten. Wer so argumentiert, kann darauf verzichten, ein "Wesen" des Menschen zu definieren – oder stillschweigend vorauszusetzen. (Whereas the Rubicon became a lead metaphor in the exchange between Rau and Markl - constituting for Rau a boundary that should on no account be transgressed and for Markl a Caesarian challenge -, Habermas argues more structurally: A precondition for any type of democratic idea of justice is reciprocity, the reversibility of social relations. Once the human being of the future is no longer somebody who has 'become', but somebody who has been 'made', a genetically engineered fix, than this boundary of reciprocity has been transgressed. Whoever argues along these lines, can give up any attempt to define the 'essence' of man – or to take it tacitly as given.)

The debate about the boundaries of stem cell science, also called the 'battle at the Rubicon' or the 'tug of war at the Rubicon' has continued in Germany well beyond 2001. Even in

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⁷ See: http://www.zeit.de/archiv/2001/22/200122 biopolitik.xml, accessed April, 2005.

⁸ See: http://www.alfa-ev.com/texte_lz_lf/editorial_lf_02.html, accessed April, 2005. Alfa = *Aktion Lebensrecht für alle*.

March 2005, when this article went through its final drafting, the metaphor still resonated through the media. The newspaper *Die Welt* asked Oliver Brüstle, 'Germany's most prominent advocate of ES cell research': "Wo liegen für Sie die ethischen Grenzen für Eingriffe in die menschliche Natur? Wo beginnt für Sie das menschliche Leben?" (Where are for you the ethical boundaries for such interventions in human nature? Where, for you, does life begin?" and in a long reply, he said:

Ich stehe Abtreibungen aus nicht-medizinischer Indikation skeptisch gegenüber und möchte sie ganz bestimmt nicht als Legitimationsargument für die embryonale Stammzellenforschung verstanden wissen. Aber in einer solchen Diskussion ist es gelegentlich notwendig darauf hinzuweisen, wo und in welchem Ausmaß wir tatsächlich den sprichwörtlichen Rubikon überschritten haben – und dies lange vor Beginn der Stammzellenforschung. (I am sceptical about abortions for non-medical reasons and I would not like them to be used as reasons to legitimate ES cell research. However, in such a debate it is sometimes necessary to point out where and to what extent we have really crossed the proverbial Rubicon – and this long before ES cell research began.) (Brüstle 2005)

Our study has shown that given the right trigger, the right social and cultural context and the right discursive circumstances, metaphors, clichés, or proverbs, which might have become stale through overuse, such as *crossing the Rubicon*, can become rejuvenated and turned into very successful discourse metaphors implicated in an extended and rhetorically complex conversation with other metaphors and literal concepts inside a given political context (see Eubanks 2000). This was certainly the case for the Rubicon metaphor in Germany. We shall now turn to the UK to see how discursively successful or unsuccessful this metaphor was in different political and social circumstances.

5. The UK: The Rubicon runs into a discursive desert

The ES cell debate in Britain was much less prominent and widespread than the debate in Germany (see Döring/Nerlich 2004) and philosophical debates such as the ones stimulated by Habermas were conspicuous by their absence. Stem cell research seems to have been successfully sold to the public as a benign and even magical biotechnology that can only be good for its potential beneficiaries, the sick and the disabled, and for the economy. Why there was no widespread opposition to this biotechnological advance is still a bit of a mystery that would deserve further study (see Hauskeller 2001, 2004a, b). One reason might be that there were no speeches or articles by prominent politicians or philosophers that could have stimulated debate. It is therefore not astonishing that the Rubicon metaphor was not used as extensively in the UK as it was in Germany. There was no political or philosophical

endorsement of the metaphor which could have launched it onto a perhaps different discursive path, compared to Germany. Another reason might be that an ethical and political discourse focusing on new reproductive technologies had been going on for a long time, since at least the 1980s and that the new discourse about therapeutic cloning and stem cells, seemed to continue this discourse quite seamlessly. It was not perceived as a break with tradition or as crossing ethical boundaries, which had, in fact, already been crossed.

When the House of Commons voted to permit regulated use of ES cells for research on 19th December 2000, Yvette Cooper, the then junior health minister, told the House of Commons: "In embryonic stem cells may lie the key to healing within the human body...These regulations do not raise any new moral issues beyond those that have already been debated and discussed in the present law. Parliament is not being asked to cross the Rubicon today." ES cell research was seen as a natural extension to research that had started with IVF and the regulation of such research was seen as fitting neatly into the legal framework provided in 1985 by the Warnock report (Warnock 1984), a situation quite different from Germany where ES cell research clashed with the 'embryo protection act'. The philosopher Baroness Mary Warnock, who chaired the Warnock committee, continues to write articles on issues of genetics and genomics and contributes book reviews to the *Times Higher Education Supplement* for example, but her interventions, unlike Habermas's in Germany, do not seem to ruffle any ethical or political feathers.

The way the Rubicon metaphor was used in the press was therefore as stereotypical as in Parliament, as the following small table shows, which lists the few quotes found in the whole of the 2001 press coverage of the stem cell debate in the UK:

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⁹ http://www.religioustolerance.org/res stem3.htm, accessed June, 2004.

Tony Blair was prepared to cross the	moral	RUBICON	
Parliament may have inadvertently crossed a			
crossing the			
no	scientific	RUBICON	was being
(not being) asked to cross the			crossed
media heralded the crossing of the	human cloning	RUBICON	

Figure 8: The rather trivial uses of the Rubicon metaphor in the UK press in 2001

Only Bishop Mario Conti, writing for *The Scotsman*, put the metaphor into a rather more elaborate but quite obscure historical context:

Like Caesar, Tony Blair was prepared to cross the Rubicon, but unlike Constantine he will not find at the City gates the labarum, the monogram of Christ, the foretelling of a moral victory. (Conti 2001)

This seems to refer to the fact that the Roman emperor Constantine I created a new military standard for his army which displayed the first two Greek letters of the name of Christ (alpha and omega) which came to be known as the labarum. It has since been used by Christians all over the world as a symbol of Christianity. For this reason the labarum is sometimes referred to as the monogram of Christ.¹⁰

As the following graphs show, generated by http://wortschatz.uni-leipzig.de/ (a database that can be used to look for semantic fields in which words are currently embedded in German, but also in English or French), the Rubicon metaphor, after being used in discourses about new genetic advances, has had a real impact on the German language, where it is now associated with words like cloning, embryos and fertilisation, whereas its use is much more non-descript in English. The way Rau used the Rubikon metaphor appears as one of the examples collected for the database. His advice to stay this side of the Rubicon also seems to have an impact on the semantic associations formed around the 'Rubicon' as 'on this side' and 'on the other side' seem to have become entrenched as semantic associates.

¹⁰ See: http://www.fact-index.com/l/la/labarum.html, accessed June, 2004.

German:¹¹

Word: Rubikon

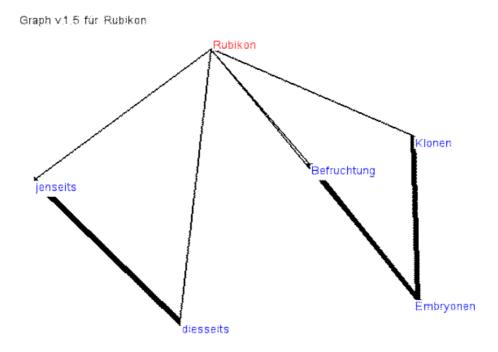
Number: 158

Partial word derived from: Operation Rubikon, den Rubikon überschreiten

Semantic groups:

Umgrenzung, Rand: <u>Baulinie</u>, <u>Demarkationslinie</u>, <u>Gemarkung</u>, <u>Grenze</u>, <u>Grenzfluss</u>, <u>Grenzlinie</u>, <u>Grenzsperre</u>, <u>Grenzstein</u>, <u>Grenzwall</u>, <u>Landesgrenze</u>, <u>Limes</u>, <u>Rubikon</u>, <u>Scheidelinie</u>, <u>Staatsgrenze</u>, <u>Trennungslinie</u>, <u>Zonengrenze</u>

Graph



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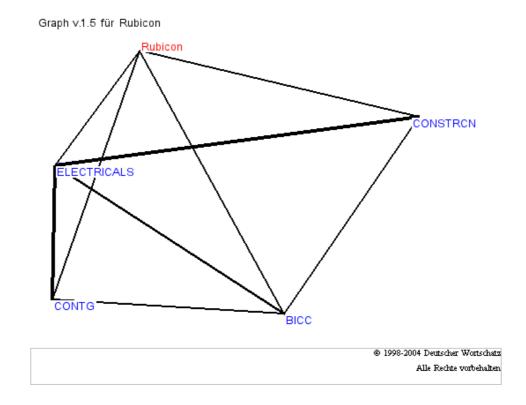
¹¹ See http://wortschatz.uni-leipzig.de/

English:

Word: Rubicon

Number: 61

Graph: [the strange associations are the result of the fact that Rubicon seems to be the name of a company]



6. Conclusion

In an article entitled "The story of conceptual metaphor: What motivates metaphoric mappings?" Philip Eubanks wrote in 1999: "Because metaphors are always uttered by historically and culturally situated speakers, metaphoric mappings are subordinate to speakers' political, philosophical, social, and individual commitments. These ideological commitments are often expressed as, and may be constituted as, stories" and he goes on to argue "that metaphors and metaphoric mappings are guided by 'licensing stories'" (Eubanks 1999: 419). The discourse metaphor *crossing the Rubicon* was embedded in a strong licensing story of historical significance and cultural resonance and was associated with prominent encyclopaedic knowledge about a phenomenologically salient feature of our everyday world: rivers. However, its discursive potential could only unfold in the right political and ideological situation.

This article shows that the discourse metaphor of *crossing the Rubicon* had a strong impact on the German stem cell debate, where it was adapted and changed by various participants in the debate to defend arguments for and against the use of human ES cells in biomedical research, but that it had much less of a 'life' in the UK.

The Rubicon metaphor resonates not only with various aspects of knowledge and experience of history, especially Roman history (and geography), but also with experiential knowledge of rivers (riverbeds, riverbanks, riverflows, dams, anchors, etc.), other conventional metaphors and clichés (such as the die is cast, crossing the line, going down the slippery slope, reaching a point of no return, reaching terra incognita, reaching the promised land, etc.), as well as other conceptual metaphors (such as SCIENCE IS A JOURNEY or SCIENCE IS PROGRESS). Much of this knowledge is shared between Germany and the UK, but there are differences. In Germany historical knowledge about eugenics has a very special ideological status; philosophers, like Habermas, influenced the debate about stem cells; and there was a rhetorical trigger factor in the form of Rau's speech that sparked off the more widespread rhetorical use of the associative networks surrounding the Rubicon metaphor. These features made the stem cell debate and the use of the Rubicon metaphor in Germany so different from what was happening in the UK, where a political trigger factor was missing, where the historical and philosophical background was different, and where a well-established and generally supportive regulatory framework regarding reproductive technologies and biomedical research muffled any dissenting voices and allowed for continuity in research.

In a forthcoming book entitled *Metaphor in Culture*, Zoltán Kövecses argues that "[c]ognitive linguists have done important work on universal aspects of metaphor, but they have paid less attention to why metaphors vary both interculturally and intraculturally as extensively as they do" (see publisher's description of forthcoming book). Going beyond some established assumptions in cognitive metaphor research and in line with research into discourse metaphors (Zinken et al. forthcoming), Kövecses' book makes the point that "[m]etaphors are not necessarily based on bodily experience – many are based on cultural considerations and cognitive processes of various kinds" (Kövecses forthcoming/2005). This article has shown how intricately bodily, cognitive, historical, cultural, social and political factors interact to give metaphors meanings in situations.

This supports research by Zinken et al. who found that 'discourse metaphors' use knowledge associated with basic level concepts; that they evolve in social interaction; and that they are firmly linked to cultural scripts and stereotypes. This study of the 'crossing the Rubicon'

metaphor has shown how metaphorical variation emerged in discourse and social interaction and was firmly rooted in cultural scripts and encyclopaedic knowledge associated with rivers in general and one river in particular. It has also shown that relatively rich images resulting from our cultural experience and interaction(s) with the world lie at the heart of metaphorical reasoning in discourse. Discourse metaphors, such as 'silent spring' or 'crossing the Rubicon', have a social and cultural history and they can influence social, cultural and economic futures.

Depending on the cultural context and the argumentative uses they are put to, such metaphors can foster public acceptance or resistance to research and development and can accelerate or slow down public investment in controversial research. This confirms yet again that the use of metaphors is not innocuous – it can have social costs and social benefits. What metaphors 'do' at any moment in time, depends just as much on how they are cognitively and physically embodied as on how they are socially and culturally embedded.

The study of metaphors 'in the real world' and 'in practice' ties in, not only with research undertaken by Eubanks, Kövecses, Zinken and others, working within cognitive linguistics (and going beyond it), but also with research undertaken in the sociology of metaphors, as advocated by Maasen and Weingart (1995, 2000), for example. This means that we seek to understand how metaphors function in various socio-political and scientific settings, how they intersect with other sets of metaphors, how they are rendered plausible or acceptable in particular situations and what discursive consequences result from their presence or absence.

It also contributes to research into the semasiology of metaphors which studies the polysemy and semantic variability of metaphors. Research by Beatrice Warren, for example, has tried to show that the production and understanding of metaphors involves property selection. She writes

One essential and necessary component in metaphorical interpretations is *property selection*. Property selection means that the interpreter has to scan all types of knowledge of the source – encyclopædic as well as linguistic – considering also the context at hand. The selected property or properties have to be divorced from the source and applied to the target. This in turn often involves *property adjustment* since the properties of the source are normally not applicable to the target as such. (Warren, ms.)

Property selection of this kind can explain some aspects of the variability of the Rubicon metaphor in use.

Both the sociology and the semasiology of metaphors are themselves linked to the pragmatics (or the ecological study) of metaphor which examines metaphors in use. All three, the

sociology of metaphor, the semasiology of metaphor and the pragmatics of metaphor can help us to understand 'discourse metaphors', such as the one studied here. A metaphor in this sense is not an entity, but an event. 12 It is by nature dynamic and interactive.

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¹² I would like to thank Beatrice Warren for pointing this out to me.

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