
Populære billeder af genetik

Interview med José Van Dijck

AF CECILIA ÅSBERG

*“Imagine having the tools to keep
up with your imagination”.*

(Reklam för Biosearch Labs i Science 265,
30 september 1994)

INTERVIEW

José Van Dijcks bok *ImagEnations: Popular Images of Science* kom ut 1998 och trots att den genetiska forskningen sedan dess har förändrats drastiskt har hennes bok fortfarande omfattande relevans för den allmänna debatten om gener och genetik. Inte minst vad gäller de fantastiska scenarion såväl som de monstruösa möjligheter med den nya genetiken som framkallas inom den breda genren av populärvetenskapliga framställningar. I vetenskapliga tidskrifter, liksom i science fiction berättelser som Ira Levins *The Boys from Brazil* (1976) presenteras spektakulära scenarion som Van Dijck analyserat som en genetisk representations-teater. Det är de metaforiska och de ikoniska bilderna av gener som studeras. Det engelska ordet *image* betyder såväl piktoral framställning som skapade mentala bilder, och betecknar också allmänna föreställningar som graverats in i vårt kollektiva kulturella medvetande. Inte minst när ett företag, en organisation eller en hel vetenskapsdisciplin strävar efter att

skapa en idealiserad *image* till sin favör, så står det klart att en *image* aldrig är en exakt avbildning av något, utan en vinklad representation som lockar fram ett nätverk av olika associationer och konnotationer. José Van Dijck skriver: "Popular appeal often takes shape through the evocative use of mental pictures or compelling stories – or through *images* and *imaginings*. Popularized science thrives on the use of images, maybe even more than on logic and arguments, but the production and distribution of popular images is seldom taken as prime object of serious critical inquiry." (Van Dijck 1998, 11, markeringar i originaltexten) På så vis gjorde Van Dijck ett pionjärbete när hon studerade de genetiska föreställningar och mentala bilder av gener och genetik som konstruerats i litteratur och media sedan 1950-talet fram till tiden *innan* Dolly, det klonade fåret (1997).

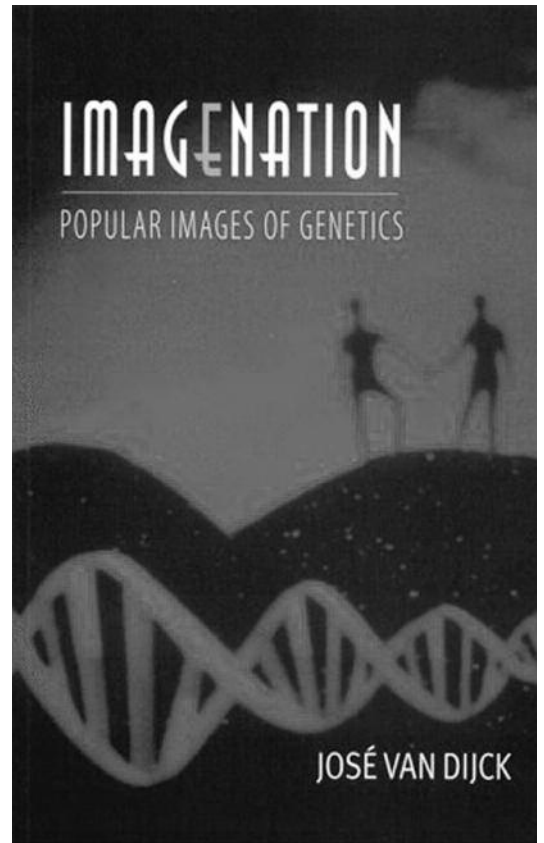
Folk i allmänhet läser oftast inte *Nature* eller *Science* för att hålla sig à jour med de senaste forskningsrönen kring genetik, reproduktionsteknologi eller stamcells forskning. Istället har filmer som *Jurrassic Park*, vilka i hög grad bidrar till cirkulationen av genetiska föreställningar, mycket höga publiksiffror. Detta visar på vikten av att studera genetiska föreställningar i film, science fiction, medier och populärvetenskap i alla dess former. Populärkulturella uttryck som *Jurrassic Park* eller *The Boys from Brazil* reflekterar inte enbart idéer om vetenskap och teknik, utan är i högsta grad också medskapare av desamma. Populär- och vardagskulturella framställningar av gener är därför viktiga deltagare i samhällsdebatten om framtiden för vetenskap och teknik. José Van Dijck pekar med sin bok på vikten av att förstå hur kultur och vetenskap *ömsesidigt* konstruerar varandra.

En viktig övergripande iakttagelse som José Van Dijck gör i sin studie av genetiska föreställningar från 1950 till mitten av 1990-talet är att även om tekniken utvecklats dramatiskt så förblir de populära representationerna därav ofta rigida och oför-



José van Dijck

Forsiden fra bogen Imagenation: Popular Images of genetics af José van Dijck. Udgivet 1998 på New York University Press.



ändrade. Samtida representationer av gener och genetik använder sig av gamla metaforer från exempelvis 1950-talet. Innanför The Human Genome Project (HGP) återanvändes om och om igen metaforer som karta, kartläggning och generna som blåkopior eller informationssystem, på ett sätt som Van Dijck hävdar inte gör rättvisa åt genetikens komplexitet. På sista sidan i boken *ImagEnations* uppmanar hon oss att delta i och förändra retoriken genom att kreativt uppfinna nya metaforer och nya sätt att föreställa oss gener. Här påminner Van Dijck om Donna Haraway (1997) i *Modest_Witness@Second_Millennium. FemaleMan[©]_Meets_OncoMouseTM: Feminism and Technoscience*. Haraway menar där att vi alla är vittnen till vårt informationssamhälle och att vi alla är ansvariga för de berättelser vi skapar om oss själva. Om vi inte tycker om de givna berättelserna får vi intervensera med nya. Van Dijck skriver att allmänhetens bild- och berättelseskapande process i vilket fall är betydligt mer demokratisk än den vetenskapliga kunskapsprocessen.

José Van Dijck är professor i medievetenskap vid Universiteit van Amsterdam i Nederländerna. Hon tog sin Ph.D. vid University of California i San Diego och har sedan dess undervisat inom området av medier, litteratur och vetenskap på olika universitet i USA och Europa. Hon har förutom den nämnda *ImagEnations. Popular Images of Genetics* (New York: New York University Press, 1998) bland annat skrivit *Manufacturing Babies and Public Consent. Debating the New Reproductive Technologies* (New York: New York University Press, 1995) och senast en holländsk antologi *Het Transparante Lichaam. Medische Visualisering in Media en Cultuur* (Amsterdam University Press 2001).

Nedan följer en intervju som gjordes med José Van Dijck i juni 2002 där det genomgående temat är genetiska föreställningar. Analytiska begrepp och samtida exempel diskuteras. Exempelen är till stor del tagna ur en angloamerikansk kontext. Där-

för följs sedan intervjun av ett inlägg av Mette Bryld i vilket hon ramar in ämnet utifrån den danska kontexten med dess lite annorlunda betoning vad gäller genetik och nya reproduktionsteknologier. I intervjun diskuteras feminism, biovetenskap, medier och den senaste tidens debatt, så att säga "post-Dolly".

Cecilia Åsberg: What is "ImagEnations" really? What do you mean by the title and in what way can the concept of imaginations or genetic imageries or the genetic imaginary help us understand our contemporary bio / popular science?

José Van Dijck: Our imagination is constituted to a large extent by the images (verbal and iconic) that surround us. *ImagEnations* is an attempt to foreground and analyze the construction of science by means of analyzing its images. I make a point of including both verbal metaphors, icons (such as the double helix) and pictures or photographs (of geneticists and genes). Another aspect of the book highlighted in the title is the role of the imaginary in science: Fantasies and desires often prompt and structure scientific inventions and discoveries. Particularly in the field of biomedicine and genetics, fantasies and science fiction abound. The advent of cloning was long prefigured in science fiction tales, and these stories have a definite impact on the collective imagination and public opinion.

Cecilia Åsberg: You have a cultural historical perspective on imageries of genes. In *ImagEnation: Popular Images of genetics* you start with the 1950s and the so called "new biology" and work your way, decade by decade, through popular writings on the genetics to the middle of the 1990s. Your theme of (textual) images of genes and genetics was then really hot in the face of the Dolly-happening in 1997, and then came the finish spurt of the HGP and so on. Now Antinori Severino, the Italian doctor

who in the late 1990s made a post-menopausal woman pregnant, claims to have cloned a human baby even though no scientific evidence has been presented. Media, ways of science communication and popular science play an important part in the interpretation of genetics. Has the role of media changed in the late 1990s early 2000s when it comes to representing genetics? And do you think the genetic public imageries have changed in our *post-Dolly* and *human cloning* era?

José Van Dijck: Absolutely, the role of media has metamorphosed substantially over the past 50 years. In the early fifties and sixties, the (written) press was fairly distanced and cautious when it came to reporting on genetics. The media showed very little interest in science anyway. In the seventies, media were still overwhelmingly critical of “breakthroughs” in the field of molecular biology, and did not hesitate to warn the public of the dire consequences of eugenics or potential environmental effects of biological spills. Since the 1980s, publicity has become more favorable and indeed more sensational. This transition in reporting biomedicine has consolidated in the 1990s and towards 2000; every new development in genetics triggers media narratives of promise and excitement, this “bioforia”, as I have called it, is still accompanied by a score of fantasies and science fiction stories.

The post-Dolly era has been marked by a remarkable revival of the kind of cloning stories that were popular in the 1970s. Dolly’s birth triggered human cloning fantasies that were partly similar to earlier fantasies (*The Boys from Brazil* type of stories) and partly different: The possibility of cloning has come much closer to home, and no longer belongs to the domain of science fiction. A very distinctive transformation in media coverage of genetics since the 1950s is the enormous increase in visual material: genes can now be photographed, visualized. Naturally, this phenomenon is not re-

stricted to science reporting; the visualization of media is a general trend in the past decade.

Cecilia Åsberg: Genetic imageries and images of genes change rapidly these days. Since your book in 1998 so much has happened on the genetic stage. From the cloning sensations of Dolly to HGP in 2000, and now the focus seems to be more on stem cells and on stem lines. Do you see it as continuous variations of ways of seeing genes, as “respatialisation of genealogy” (Franklin 2000, 190) or is it a whole new paradigmatic shift from genes to stem cells?

José Van Dijck: No, I did not perceive it a paradigmatic change; I agree with Sarah Franklin that the stream of images and imaginations shows a steady flow, but they feature a number of recurrent variations on themes like rebirthing, cloning, eternal life, carbon-copy humans, etc. As I mentioned before, I think these stories seem more realistic now than the fantasies aired in the 1960s and 70s. Yet the shift from genes to stem cells has triggered variations rather than showing a paradigmatic shift.

Cecilia Åsberg: You have these expressions of “biomania” and “biophoria” to describe the 1980s and the 1990s – how would you label and describe our “genophilic” contemporary era?

José Van Dijck: That’s an interesting question and a nice way of putting it: We have certainly passed the stage of biophoria. The early 1990s were the age of the heroic Human Genome Project that was heralded as the “United Nations of Science” effort. I have described this period with the necessary distance and criticism in my book. The era after 1998, or let’s say, the era we have now embarked upon is characterized by normalization: The euphoric period is over, we are getting used to biomedicine taking up a substantial part of our national invest-

ments. The HGP has accomplished its first set task: mapping the entire genome. Yet, this is only the beginning. The public has become used to remarkable “breakthroughs”: first Dolly, and now everyone is prepared for the first real human clone (despite the fact that this expectation is still unrealistic and imbued with deep existential uncertainties). However, the breakthroughs are not the real story, but the gradual complete acceptance of genetics as an important part of our lives and science is. That is what “genophilic” stands for: The natural acceptance or *naturalization* of genetics and molecular biology in our culture is. In the Netherlands, the National Organization of Science now spends the overwhelming part of its national research budget on genomics and biomedicine.

Cecilia Åsberg: In your book *ImagEnations* you stress that genetics has always been a contested field – in what way, apart from rejecting it as non-interesting reading – do you think laypersons have the opportunities to contest produced meanings of genetics? Feminists as well as environmentalists have been contesting the dominant meanings of genes and genetics – why is that? What implications do genetic imageries have on our thinking about nature and culture, about reproduction and sexuality that has interested feminists, you think?

José Van Dijck: Genetics has always been a contested field – although, as a field of science, it is not unique in this respect – because it triggers fundamental questions about reproduction and life. Obviously, feminists have great stakes in this contest, just like environmentalists: Every attempt to alter or manipulate human nature raises the question of long term effects on evolution, the perpetuation of the human race and the sustenance of global environment. However, the interests and stakes of feminists and environmentalists in this contest, as I have shown in my book, are not automa-

tically aligned. It’s important to distinguish these interests because it helps you understand the complex layerdness of the public debate on genetics.

The images and stories on genetics are never simply stories of science: They configure a situation in which these technologies have an effect, they show how they impact our daily lives, the way we reproduce ourselves. Science by itself is very hard to imagine; that’s why we make up stories. In these stories, not genetics itself but our way of thinking about nature and culture, about reproduction and sexuality are always center stage. That’s why I’m so interested in *who* tells the story, from *what* perspective and with *what aim*. Stories have the ability to be dialogic, to confront (in the Bakhtinian sense) a number of perspectives and points of view.

Cecilia Åsberg: From Shulamit Firestone (1970) to the FINNRAGE-feminists (1980s) to Donna Haraway’s cyborg feminism (1990-2002) feminists have always been interfering (in a non-univocal way) with the genetic discourses, can you describe your historical view on the feminist contestations?

José Van Dijck: As I said before, women have enormous stakes (perhaps the greatest stake) in genetics, so it is only natural that they have been vocal contestants in this public debate. I have been careful to incorporate these voices of feminists in a historical perspective: The radical voices of women and their outrage against genetics in the 1980s was not restricted to feminist groups, but they were some of the most vocal opponents of genetics. In a way, feminist criticism of genetics has become more philosophical, more theoretical and some would say more subtle and nuanced. In my view, this is part of a general historical shift in feminist awareness and social consciousness. It is a mistake to view feminist voices, in this debate, as separate from science and

culture as a whole. That is one reason I favor a more historical approach to analyzing feminist voices as part of a debate on nature and culture; feminist contestations have not become less critical or political, on the contrary.

Cecilia Åsberg: You developed an analytical concept for seeing/investigating the genetic imaginary; you analyzed it as a theatre, as a “theatre of genetics” (Van Dijck 1998, 23). Inspired by Kathrine Hayles’ (1993) notion of “theatre of representations”, you analyzed genetics as a stage production with its own scripting, staging and setting. What are the uses of this (also Goffman inspired?) kind of approaches to genetics as performances put on stage, seen from an epistemological point of view?

José Van Dijck: Ah, you touch upon a sensitive point here. Using Hayles’ and indeed Goffman’s theories and frame for analysis, I embarked on a theoretical and analytical adventure that was not always successful. The theater model was meant to open up the reader’s eyes for the multi-layeredness

and multi-facetedness of a public debate in which so many groups participate and so many interests are at stake. I wanted to try a theoretical model that was more powerful than a narrative analysis because it would encompass the institutions in which the enunciation is embedded as well as the “performance” of the enunciation. I am not sure if I have succeeded in doing that. In one respect my model has certainly been lacking: It failed to deal with the actual images (especially moving images, television, film) of genetics. My next book, *The Transparent Body. Medical imaging in media and culture* (which has already appeared in Dutch and I am currently working on the English version), deals with the issue of visualization in medical science – a fascinating subject. In the theater of representations (a term I still like), I think the visual has been under-theorized; embroidering on my focus on metaphors and verbal images, fantasies and projections, I now try to include an analysis of the visual and scientific visualization – a powerful rhetorical instrument.

Cecilia Åsberg: Thank you.