

# Human Enhancement

Democs game (ver 2.0)

This Democs game has been produced as part of the ETHENTECH project (Ethics of Enhancement Technology) which is a Collaborative Project funded from the European Community's Seventh Framework Programme (FP7/2007–2013), Science in Society, SIS-2008-1.1.2.1 Ethics and new and emerging fields of science and technology, grant agreement 230361.

**Copies of the game and cards may be downloaded free from:**  
[www.edinethics.co.uk/ethentech/democsgame.htm](http://www.edinethics.co.uk/ethentech/democsgame.htm)

**If you would like to find out more information...**

**about the EC ETHENTECH project**

[http://www.kth.se/abe/om\\_skolan/organisation/inst/philhist/phil/research/bioethics/projects/ethentech-1.64802](http://www.kth.se/abe/om_skolan/organisation/inst/philhist/phil/research/bioethics/projects/ethentech-1.64802)

Co-ordinator Prof. Sven-Ove Hansson, Philosophy Division,  
Royal Institute of Technology, KTH, Valhallavaegen, Stockholm, Sweden.  
Email: [soh@kth.se](mailto:soh@kth.se)

**about Democs games**

Contact Perry Walker, Fellow, New Economics Foundation,  
3 Jonathan Street, London SE11 5NH.

Tel: 07858 750936 Email: [perry.walker@neweconomics.org](mailto:perry.walker@neweconomics.org)

**about this game and about Edinethics Ltd**

Contact Dr Donald Bruce, Edinethics Ltd.,  
11/6 Dundonald Street, Edinburgh EH3 6RZ

Tel: 08456 444937 Email: [info@edinethics.co.uk](mailto:info@edinethics.co.uk)

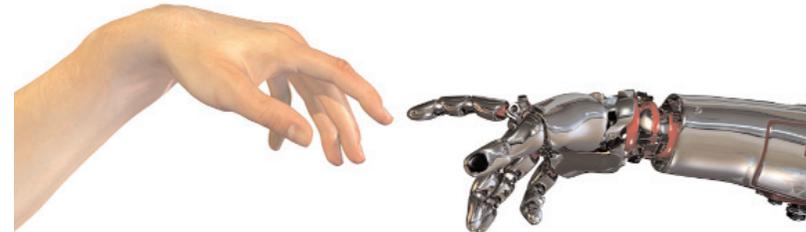


# Human Enhancement

a Democs game

to discuss an emerging field of science  
and what it could mean for our lives.

## Game instructions



This Democs game has been created by  
the New Economics Foundation and Edinethics Ltd.  
as part of the ETHENTECH Project, funded by the  
European Commission Framework 7 Research Programme



## What's this all about?

Democs is a group discussion method based around cards which was devised by the New Economics Foundation (**nef**) in 2001.

This Democs game is a chance to explore whether we should try and enhance the human body and brain, using new technologies. You can learn about what might be involved, consider the issues, and give your opinions about it. No expert knowledge is required!

## So what's Human Enhancement?

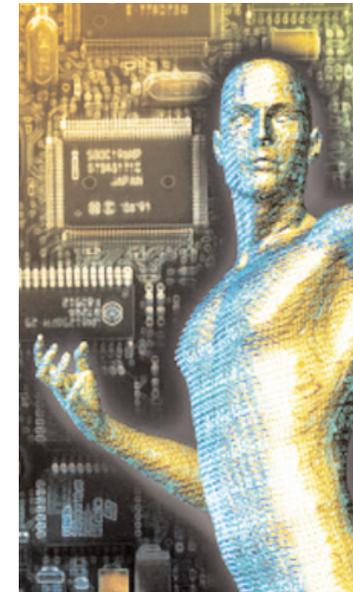
Human enhancement is the idea of using new technologies to enhance the human body and brain which, some claim, could make us stronger, smarter, more responsive to our environment, longer-lived, maybe even to give us new capabilities.

Developments now emerging in many fields, like nanotechnologies, molecular biology, computing and brain science, might one day make such changes feasible. What we're talking about is still mostly in the future, but it's seen as a serious enough question for the UK and other European countries to start to ask our societies what we would think about these new ideas.

Human enhancement raises many issues. What are the limits (if any) to being human? Is there a difference between repairing the body and enhancing it, or between using tools outside the body (like a computer) and, say, implanting a chip in our brain? What about risks? Who would get access to these new abilities? Is it a matter of individual choice or should society regulate it? And much more.

## Where do I come into this?

This Democs game is part of a European Commission research project called ETHENTECH, to ask members of the public like you what you think about human enhancement, in the UK and across the EU. We're also asking ethical experts and members of religious communities. Your responses, and those of many other players across Europe, will help us produce a report to the European Commission about public and expert views on enhancement, and whether regulations might be needed. The game has been written by Edinethics Ltd, an Edinburgh-based consultancy company on ethics and technology.



## Democs instructions

### What is a Democs game?

**Democs is a conversation card game.** Players get hands of cards and take turns to play them. But instead of playing to win, they are playing to learn about an important new issue – in this case it's human enhancement – and form their opinions about it. At the end of the game, the players will get to vote on some possible applications. The kit is made up of several different types of cards. Most have information, ideas or stories about the topic.



Photo: Andrea Bandelli

### One person acts as the dealer.

It's the dealer's job to explain the rules, ask the questions and deal the cards, but he/she is not expected to be an expert on the subject! Usually, the dealer will be the person who has organised the game.

If you are thinking about organising a game, go for it!

### Democs is designed to be played anywhere, by anyone.

All you need is a kit, about six to eight people (though you can play with more or less), a table and an hour and a half to two hours. You don't need to know anything about the topic to run a game and the rules are simple and easy to understand.

## How the game works

A Democs game has five rounds. In rounds 1, 2 and 3, players get dealt different hands of cards which are read out and discussed. The first round everyone is given a single story card to read out. In the rounds 2 and 3, players are given Information cards and Issue cards, respectively. Each player is asked to look at his/her hand of cards and select the ones they think are most important or interesting. They read them out to the group, say why these ones interest them, and place them on the table. The group can comment and discuss them.

As the discussion develops, certain topics will have come out. In round 4, players are asked to gather these into opinions, questions or statements which they would like to make about human enhancement, by grouping the cards into clusters. There can be several clusters on different topics, each of which gets written down on a cluster card.

In the final round (round 5), each player is given a voting grid and is invited to vote first on the principle of human enhancement and then on the acceptability, or otherwise, of a set of 8 applications, giving their reasons in their own words. Each player votes individually.

After the game, there is a stamped addressed envelope for the dealer to send the cluster cards, voting grids and feedback form to:

### England and Wales

– Perry Walker, New Economics Foundation, 3 Jonathan Street, London SE11 5NH.

### Scotland

– Donald Bruce, Edinethics Ltd., 11/6 Dundonald Street, Edinburgh EH3 6RZ.

We will include your votes, comments and clusters as part of our analysis of the results, from your game and all the others. Your feedback is also important for us to know who has played the game, as well as an ongoing task of improving the game.

## Kit contents

One set of instructions (which you're reading!)

### Main cards

You can use these cards every time you play:

- 6 large pink story cards (Set S)
- 36 green information cards (Set A)
- 45 blue issue cards (Set B)
- 3 'yellow cards'.

### Single-use items

These items get written on during the game. We've given you enough for one game, with a few spares. Extra items can be downloaded from the website for you to print if you need to. [www.edinethics.co.uk/ethentech/democsgame.htm](http://www.edinethics.co.uk/ethentech/democsgame.htm) For example, if you play a second game you will need up to 8 fresh copies of the voting grid, more cluster cards and an address label (though you will have to pay the postage).

- 8 purple cluster cards
- 8 grey blank cards
- 8 orange and white application voting grids on human enhancement applications
- 1 feedback form
- 1 stamped addressed envelope (SAE).

## Dealer's instructions

### Before the game – setting up

As the dealer, spend a little bit of time getting ready before the game starts.

You need to:

- Read the instructions carefully to make sure you understand what happens in each round. There's a timetable on pages 5-6, but it helps to know where you're going beforehand.
- Check the kit to make sure you have everything
- Find a table, and a few pens
- Lay out the elements of the kit on the table in the order they will be used.

### Top tips for dealers

- 1 **The rules are not the point.** The aim of this game is let people discuss the issues. As long as people are discussing, don't worry too much about the details.
- 2 **It's good to talk...** Since the point is to talk about the issues, encourage people to say what they think and to respond to each other's views (politely!)
- 3 **...but silence is OK too.** At the beginning of the game, people will spend more time reading cards than talking. Don't worry, discussion will come later.
- 4 **No surprises.** Make sure all the players know how the process fits together so they can figure out what they need to do next.
- 5 **Stick to time.** If you think you'll struggle, set an alarm that rings when the each session should end.
- 6 **Don't get involved in the conversation.** Your role is to help other people to have their say. If you keep talking, you'll disrupt other peoples' ability to have their own conversation.
- 7 **Everyone deserves to be heard.** Make sure everyone gets the chance to speak. One way to do this is to ask people at the start to agree to let others finish before they start to speak. If you do this, remind people of their agreement when they forget it!

## Basic elements of the game

### Story cards (set S)

These are stories about some people and situations to do with human enhancement. While all of the people are fictitious, the stories are based on real issues which have arisen, or on ones which might be envisaged in the future.

### Information cards (set A)

These are basic facts about human enhancement. These come from experts and reliable sources of information.

### Issue cards (set B)

These are different viewpoints and opinions on human enhancement. We don't expect you necessarily to agree with them all; they are here to make you think.

### Cluster cards.

These are used to label groups of cards which the players make and say what they mean. You can write directly on these.

### Blank cards

If anyone thinks of something important that's not included, they can write it down on a blank card.

### Yellow cards

If anyone is getting confused or feels someone's hogging the discussion or going off on a tangent, play a yellow card. The dealer will then stop the game and sort things out.

### Voting grids

These are sheets each with a grid of 8 applications of Human Enhancement to vote on, 4 on each side. One voting sheet is given to each player.

### Feedback form

So that we know who and where your results have come from, what you thought about the game, and what could be improved.



## How to play the game

### Introduction

Before you start, it's important that everyone knows the basic rules of the game. First of all, the dealer should **explain the basics of the game**. If you like, just read out the paragraph below on 'What is This Game About?' Explain that these discussions often work better if people agree on some guidelines beforehand. Then **read out the conversation guidelines** below and check that everyone is happy with them. Next, the dealer should **explain what each of the sets of cards are and what they are for**. You can use the table on page 6.

### What is this game about?

Human enhancement raises ethical and social issues which we need to discuss together as a society. This Democs game has been created so that members of the public like you can learn about human enhancement, using sets of cards. You can explore these wider questions, by working with the cards, and give your opinions at the end by voting on various applications. It's a new field of technology, so don't worry if you don't understand everything at once! This is an opportunity to learn and discuss.

### Conversation guidelines

- We are all equal – one person, one voice, one vote.
- Your view matters – especially if you are the only one that holds it.
- You have a right to be heard – but so does everyone else.
- Listening is as important as speaking – so work at understanding as well as being understood.
- Find common ground – look for where you agree.
- Don't worry if you are surprised or confused – it might mean that you are learning something new.

## Timetable – 90 minute version

If you have longer, please increase the timings appropriately.

Introduction	5 mins	The dealer explains what Democs is about, reads the conversation guidelines, and tells the group what each type of card is for. Then the dealer reads out the introductory page 2 about human enhancement.
Round 1 Stories	10 mins	Players use the story cards to introduce some of the issues about human enhancement through people who are imaginary but facing plausible situations.
Round 2 Information	15 mins	Players are dealt a hand of information cards about human enhancement. They choose two that interest them, to share with the group. This starts to assemble a shared knowledge 'bank'.
Round 3 Issues	15 mins	Players select from the issue cards in the same way, opening up ethical and social questions that they think are important.
Round 4 Creating clusters	30 mins	The group discusses the topics that are beginning to emerge, linking cards they have chosen in the previous two rounds into clusters. Each issue is made into a statement or question, written on a cluster card.
Round 5 Voting and feedback	15 mins	Players give their views by voting individually on the principle of human enhancement and the acceptability or otherwise of a set of 8 applications. Dealer and Players also fill in the feedback form.

## Round 1

Now you've explained how the game works, we turn to the subject itself, human enhancement. Because it will be unfamiliar to most people, read out to the group the whole of page 2 of this instruction booklet, entitled 'What's this all about?'.



This introduces the basic idea of human enhancement. Then explain that the players will find out more as the game proceeds, starting with a set of stories about people and situations to do with human enhancement.

Deal out the story cards to each player.

### Story cards

This is where each player is given a story to help them think about the important issues around human enhancement. Tell them that the cards about fictitious people, but that the situations portrayed are real or ones which could be envisaged in future.

**Shuffle the big pink story cards and give one to each player.** (There are seven of these, so if there are more than seven players, some will have to share.) Each card ends in a dilemma.

**In turn, ask each player to read out or summarise their card.** When they have read it out, if they want they can say what they think about it and other players can respond. But stick to time.

If anyone is very unhappy with their card, they can swap it for one of the spares (if there are any), or with one of the other players if both people agree.

Ask each player to put their story card in front of them, face up.

## Rounds 2 and 3

### Information cards and issue cards



These two rounds are the main information gathering stage. Players will look through the information and issue cards and choose the most important ones.

**Shuffle the green information cards and deal them all out to the players.** It doesn't matter if not all players have exactly the same number of cards.

**Each player should pick the two most important cards from their hand.** Players can choose what 'important' means for themselves. It could be:

- relevant to the dilemma on their story card
- interesting
- surprising
- something they strongly agree with
- something they strongly disagree with.

Once players have chosen their final two cards, the rest of the cards can be put to one side.

**Ask players to take it in turn to play one card by reading it out to group and then explaining why they chose it.** Once a player has finished reading the card out, other players can say something in response if they want to. Once the discussion has finished, the player puts the card down face up next to their story card. Each player should have two cards, so you need to go around twice.

**After all the players have played their two green cards, deal them a hand of blue cards and do the same thing again.**

## Round 4

### Creating clusters

In Rounds 1 – 3, players have put together in the middle of the table the green and blue cards they chose, together with each person's Story Card. These cards together form a 'knowledge bank'. The purpose of Round 4 is to try and identify main issues and common themes, and enter these on cluster cards.

There are two main ways to create the clusters. If your group has already identified some issues, look among the cards on the table and gather into a cluster the particular cards that relate to each issue. They can use blue cards, green cards, story cards, or a mixture of all three. The alternative way is to start with the cards on the table, to cluster the ones that seem to belong together, and create a theme from them. In practice you may do both. It's up to the players to decide what the clusters are about. The eventual aim is to create up to four or five clusters.

Some groups have found it helpful to start with one (or more) of the story cards and look for other cards that help tackle the dilemma on the card, and make these into a cluster.

**Once the players are happy with a cluster, they need to fill in a cluster card.** There are three things to decide and fill in.

First decide a title for the cluster and write this in the first space. Then the group should come up with a one or two sentence statement, and write this in the second space on the card. This might be a definite opinion, but it might also be an unresolved question or dilemma. Try and make **the message** as clear as possible so that we can understand exactly what you mean. Thirdly, **write the numbers** of all the cards in the cluster on the bottom of the card. This is so we have a record of which cards were used. This is used as part of our analysis.

### Creating clusters (continued)

Encourage the players to take their time so that everyone is happy with the clusters. Look for consensus as far as possible, but if opposing opinions come out, then these can both be given.

**In the same way, complete a cluster card for each of the other clusters.** It's perfectly OK to use any card in several clusters. If the players think of things that are important, but which aren't on any of the cards, they can write them on a blank card and add them to the clusters.

Cluster cards are important because they allow you to tell us what you think, in your own words. These opinions and the list of cards you selected both become useful data when we come to analyse the results of all the games.

### Round 5 – Voting

**In this last round, players are asked to vote on the voting grid sheets. Unlike the clustering, which is a group exercise, each person has their own sheet to fill in, and each votes as an individual.** First, each player is invited to vote on the principle of human enhancement, then on the acceptability (or otherwise) of a set of 8 applications of human enhancement, 4 on each side. Each player puts a cross to show their opinion. Invite them also to put in their own words why they think so, in the big box underneath the voting area, if they feel they can do so. For each application they are also asked to say if each application should be decided by society, or whether it's a purely private matter. Point out to the players that there are four applications on the front – examples which already exist – and four on the back – future possible applications.



**Thank everyone for taking part and ask them to help you fill in the feedback form. This gives people the chance to say what they thought about the game.**

When you have done this, write at the top, the date the place and the name of your group, so that we know which game this was when we come to analyse all the results. Then take the four or five cluster cards, and the voting cards and any blank cards people have written on and put these with the feedback form into the stamped addressed envelope provided and send this back to us.