NOVA
GUIDE
Tools and methods for NORM-CREATIVE INNOVATION
GUIDE
NOVA
Self-interest is a given. What’s more, we are most often creatures of habit. We are guided by the norms and values that have shaped us, even if we believe that we are innovative. We then risk creating solutions that discriminate and restrict.

One major challenge lies in understanding other people’s needs. If we can apply a norm-critical perspective and succeed in looking beyond our own view of the world, we can realize greater potential within innovation. Realizing this potential is easier said than done, however. Doing so requires what we call ‘norm creativity’.

Norm creativity is based on an awareness of the fact that norms and values can limit and discriminate. It also requires an analytical element that focuses on investigating people’s true situation and deep-seated needs.

NOVA contains concrete tools and methods designed to assist those seeking to create such norm-creative solutions. The material is based on practical experience and research gathered from a host of different projects and studies. The format chosen aims to promote creativity and collaboration. The focus is on norms that discriminate, although in reality, the content can be useful in all innovation-related contexts. After all, all innovation is about challenging norms.

After a long process that has seen everything from sick leave and motorcycle accidents to teething problems and teenage rebellions, we are incredibly pleased to finally be able to present NOVA.

Mariana Alves Silva, Karin Ehrnberger,
Marcus Jahnke och Åsa Wikberg Nilsson
Luleå, Gothenburg and Stockholm in January 2016
ABOUT VINNOVA

Vinnova is Sweden’s innovation agency. Our mission is to promote sustainable growth by improving the conditions for innovation, as well as funding needs-driven research.

Vinnova’s vision is for Sweden to be a world-leading country in research and innovation, an attractive place in which to invest and conduct business. We promote collaborations between companies, universities, research institutes and the public sector. We do this by stimulating a greater use of research, by making long-term investment in strong research and innovation milieus and by developing catalytic meeting places. Vinnova’s activities also focus on strengthening international cooperation. In order to increase our impact, we are also dedicated to interacting with other research financiers and innovation-promoting organisations. Every year Vinnova invests about SEK 2.7 billion in various initiatives.

Vinnova is a Swedish government agency working under the Ministry of Enterprise and Innovation and acts as the national contact agency for the EU Framework Programme for R&D. We are also the Swedish government’s expert agency within the field of innovation policy. Vinnova was founded in January 2001. About 200 people work here and we have offices in Stockholm and Brussels. Our Director General is Charlotte Brogren.

The Vinnova Report series includes publications and reports, often by external authors, from programmes and projects that have received funding from Vinnova. Includes also editorials related to Vinnova’s mission, by independent authors.
6 Vinnova’s Preface

Sweden is highly ranked on the innovation index and the gender equality index. By combining these areas of strength, we can achieve sustainable social development.

Tools and methods are required to be able to work with this combination. We began creating such materials in the Genuslabbet (Gender Lab) project in 2014. In Genuslabbet, ten different companies and public organizations collaborated in a norm-critical innovation process led by the authors of this material. The project resulted in six different cases that illustrate what norm-creative innovation can entail, as well as an array of useful tools and methods.

Throughout 2015, efforts were ongoing to package the tools, methods and experiences to distribute them to everyone who wants to work with norm-critical and norm-creative innovation. The lab was also expanded to take a norm-critical perspective that includes all the protected grounds of discrimination.

The result is NOVA – tools and methods for norm-creative innovation.

Stockholm in January 2016
Sophia Ivarsson, Vinnova
We have many people to thank. A big thank you to everyone who reviewed and contributed to the material with your innovation, design, and norm-critical expertise: Magdalena Petersson McIntyre – Gothenburg University; Kerstin Elias and Ragnhild Berglund – SP Technical Research Institute; Hanna af Ekström – Utopia; Julia Fredriksson & Sara Ljungblad – Chalmers University of Tech.; Thérèse Kristiansson & Katarina Bonnevier – MYCKET/ ArkDes; Frank Berglund – RFSL; Simone Lindsten – The Allt är Möjligt network; Katarina Wetter Edman – Konsifack; Emilia Åkesson – Amphi; Emmy Linda Al-Ghussein; Carolina Hemlin – RFSU and Sophia Ivarsson – Vinnova.

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Finally, we would like to give an extra big thank you to everyone who fights for a more open society with love as a guiding light!

Mariana Alves Silva, Karin Ehrnberger, Marcus Jahnke and Åsa Wikberg Nilsson
Norm-Creative Innovation is Based on Norm-Critical Awareness...

Norms and values function as necessary principles and support for our social interactions. We take them for granted and they are not usually a problem, but sometimes they lead to discrimination. Norm criticism is about pointing out and becoming aware of such discrimination and examining how it works. This could involve how norms are discriminatory in social interactions between people, but also how the things we have created—such as products, technical solutions and built environments—are sometimes discriminatory.

Norm-Creative Innovation Supports Gender Equality and Social Equality...

This material aims to support the development of innovative solutions for a more equal and gender-equal society from a norm-critical perspective—the application of norm creativity. This can involve everything from fewer stereotypical products and services to more inclusive environments and social contexts. The material focuses on the seven grounds of discrimination that are regulated by Swedish law: sex, transgender identity or expression, ethnicity, religion or other belief, disability, sexual orientation and age.

Norm-Creative Innovation Strengthens All Forms of Innovation...

Innovation research shows that development is partly governed by norms. This could mean a certain technology or technical solution is considered the right one.
Such norms create consensus in an organisation, but they can also be problematic if a new kind of technology or solution is on its way in. In such cases, it is not uncommon for the new idea to be explained away, and thus the norm becomes a barrier to innovation. So even if the norm does not lead to discrimination, a consciously norm-critical and norm-creative approach is an advantage for all innovation.

NORM-CREATIVE INNOVATION REQUIRES CHALLENGING OUR UNDERSTANDING OF THE PROBLEM...
A common preconception is that innovation is about solving a well-defined problem. But this starting point can easily get in the way of true innovation. Norm-creative innovation requires the crucial, often difficult first step of taking a step back to challenge and broaden our actual understanding of the problem. This is the exact opposite of an impulse that is typical of many companies: to immediately problem-solve, rather than problematise. NOVA provides tools for deeper problematisation.

NORM-CREATIVE INNOVATION CHALLENGES PERSONAL UNDERSTANDING...
Norm-creative innovation is based on a design process. Design is about starting from the user’s needs, that is, understanding someone else’s reality, and creating solutions based on that understanding. This goal is based on the realisation that we all have pre-understandings, or prejudices, that can get in the way of a deeper understanding. Understanding someone else’s reality requires challenging our own pre-understanding and worldview. NOVA contains methods that will challenge and expand your worldview.
Everyone may contribute, regardless of whether they are more critically or creatively inclined. NOVA supports collaboration.

**NORM-CREATIVE INNOVATION HELPS PEOPLE GROW...**

In our experience, as processes gain speed, when friction becomes an active, investigative and creative practice, the result is norm-creative innovation in the form of refined solutions that could not have arisen within the framework of the earlier, more limited understanding. But the processes also result in participants’ individual growth and subsequently, a more multifaceted understanding of the world. We believe that result to be an equally important outcome of working with NOVA.

**NORM-CREATIVE INNOVATION REQUIRES MORE THAN METHODS...**

Norm-creative innovation also challenges the typical notion that a good method is enough. Norm-creative innovation requires knowledge, experience and a perspective that no method in the world can capture. We believe that methods only serve to support a process that must be customised to suit each unique challenge. But methods still have an important function. Methods can be something to stick with in uncertain territory; they can be used to spur action that might otherwise feel unfamiliar and uncomfortable, and they can inspire new, more varied work approaches. We hope NOVA’s methods can serve this purpose.
NOVA contains 54 cards, just like a deck of cards, but NOVA is not a game – right? Unlike a book, for example, cards allow for a social and interactive process. The cards can be grouped and sorted in different ways. We can place the cards on the table, spread them out on the floor, or put them up on the wall to frame a problem or an applicable tactic. One exercise could be to draw a card from the deck and then to read it and discuss. Or why not make a quiz, with questions like: What is the Adjustable Wrench tactic used for? The cards can be consulted at random when inspiration is needed, and of course, they can also be read straight through, one after the next.
FOUR SUITS WITH TOOLS

14 THE FRONT OF THE CARDS

The front of the cards have four different card categories, called suits (or colours). These four suits represent four different tools that are important in a norm-creative innovation process. The tools have been developed based on experiences from both practical projects and research projects. In the norm-creative process, it is beneficial to alternate between the different tools. In other words, they should not be used in a specific order. The four tool suits are:

♠ NORMS – explains how norms limit us in terms of products, services and environments.
♣ TACTICS – describes work methods for achieving norm-creative solutions.
♥ ROLE MODELS – presents examples of norm-creative innovations.
♦ EXPERIMENTS – provides examples of different shapes and forms of expression from the same product category – the cup.

Each tool suit has thirteen denominations – the Ace, with an introduction, and twelve cards with the contents of the suit. The method on the back of the card and the tool on the front are not related. However, some suits specify a connection to another suit, at the bottom of the card. More details are given in the introduction card of each suit.

In addition to the suits, there are two trump cards – the Jokers. They have a higher value than any other card and may be used whenever needed. For example, the Joker may be presented if the conversation or process is deliberately or unconsciously reproducing stereotypes, instead of being norm-critical – to highlight the problem.
F education with Methods

15 THE BACK OF THE CARDS

Every deck of cards has a backside, and we have used it to present 48 methods. There are hundreds of design and innovation methods. We have made a selection that comprises a solid foundation for norm-creative innovation. We have also included methods that are important for challenging norms and values.

We do not expect all of the methods to be used. Alternating five to ten methods with other activities is often enough. Nor do we expect them to be used in a particular order. The order depends entirely on the nature of the project.

The methods are divided into four suits that correspond with the most important activities in a norm-creative innovation process:

- **CHALLENGE** – norm-critical methods for analysing and challenging norms and values.
- **EXPLORE** – norm-critical and norm-creative methods for analysing problems and contexts.
- **EXPERIENCE** – norm-creative methods for developing a deeper understanding of context.
- **SHAPE** – norm-creative methods that support the development of prototypes and solutions.

Each method suit has an introduction card and twelve method cards. Each method card includes suggestions for the appropriate number of participants, how much time the method is expected to take, a description of the method, and tips for tactics and norm cards that can provide helpful support. We also provide tips for other complementary methods. The section titled Suggestions for Further Reading below contains references to more detailed descriptions of some of these methods.
METHODS CHALLENGE
○ Introducion
Call into question
Look in the mirror
Explore taste norms
Take a stand
Embody the idea
Bring to mind
Step forward
Prototype
Subvertise
Find the pattern
Hatch good ideas
Get the point

THE JOKER
Killjoy

METHODS EXPLORE
○ Introduction
Keep on top
Add more layers
Scratch the surface
Get the picture
Read between the lines
Bloom where you’re planted
Rewind the tape
Fast forward
Follow your dreams
Direct your focus
Broaden your horizons
Have coffee together

METHODS EXPERIENCE
○ Introduction
Think with your body
Throw yourself into the game
Let others speak
Follow suit
Make it happen
Play a role
Name the character
Seize the day
Take a hike
Get the ball rolling
Walk in another’s shoes
Knit together

METHODS SHAPE
○ Introduction
Cut and paste
Blow it up
Define the technical
Praise and critique
Dry run
Raise the curtain
Draw the outlines
Get in the mood
Put in print
Frame by frame
Cut to the chase
Put it all together
4. Author’s preface
5. About Vinnova
6. Vinnova’s preface
7. Thank you!
8. NOVA's starting points
13. NOVA: s tools and methods
18. The Norm-creative innovation process
20. Tips for norm-creative work
25. Useful concepts
31. Suggestions for further reading
36. The creators of NOVA

A Introduction
2 The hole punch
3 The sledgehammer
4 The plastering trowel
5 The precision screwdriver
6 The twirl whisk
7 The camouflage net
8 The adjustable wrench
9 The welding torch
10 The lever bar
11 The eraser
12 The grater
13 The garden trowel

A Introduction
2 The Andro chair and Kim
3 The CP beer
4 SimChild
5 The waste services
6 The emergency queue
7 All aboard
8 Hövding
9 Women’s shelters
10 The work kilt
11 Equalisters
12 Build your own Volvo
13 La playa
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focusing on the development of norm-critical design methods, such as Arbetsmiljö i industrin [Industry Work Environments], Framtidsfabriken [Future Factory], Daring Gender, the Mäta Jämt Project, Genovate, and Women in Engineering Programmes. Åsa has participated in the development of everything from the design of demolition robots to graphic design and interaction design of e-health products. Åsa has also written books and articles about design methods, learning and norm-critical innovation methods, and is passionate about socially sustainable design through user-centred design methods.
NOVA – Tools and Methods for Norm-Creative Innovation

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CHALLENGE

To develop something new and different, we must first understand people’s needs. This assumes empathy and compassion, which may sound simple, but requires practice. Our ability to experience the daily lives of others is limited. We often start from what we have personally learned and experienced. So how can we understand someone who experiences discrimination if we have not experienced it ourselves, or at least not in precisely the same way?

It is actually possible to understand, at least enough to make a difference. It happens when we acknowledge that our understanding is limited and that the privileges we live with and take for granted do not apply to everyone. For an innovation process to be possible, we must be willing to challenge our pre-conceptions. Our personal experiences are central tools along the way, but we must also listen to the experiences of others that differ from our own. Emotions and experiences are important resources to better understand someone else’s situation and needs.

These methods help us challenge learned thought patterns, values and norms individually and as a larger group. We will use norm-creative innovation to actively examine norms and values, all the way to the finished result.
RIBBONS AND RELIEFS

Spangles, frills, flourishes and finery. There are numerous synonyms for decoration. The value of decoration in Western culture is revealed by these words, which make us understand that decoration is insignificant and unnecessary. About a hundred years ago, both sewing machines and guns were richly decorated with flowers and leaves. Decoration and ornamentation have since become taboo. Shapes should have a ‘clean’ look to emphasize the development of rational technology. Machines were the future, while ornamentation and decoration were considered obsolete handiwork and a form of amusement for women. A razor sharp distinction was made between what was perceived as practically functional versus what was perceived as unnecessary adornment.

The fact that practical functionality and aesthetics are intimately connected is still obscured. Consider how a motorcycle engine is carefully designed, or how reliefs on a window frame also filter and soften the light entering the room. This invented division and associated hierarchy have resulted in the acceptance of decoration that relates to function, such as plastic imitation bolt heads on a drill, while a flower on that same drill would reduce its value and credibility. There are no truths here. The devaluation of decoration is problematic. It is still used to create differences in worth between men and women, adults and children, upper class and lower class, and the division of the ‘Eastern and Western worlds’. Such devaluation also facilitates cultural appropriation — when various cultural or religious expressions with deep significance are taken over and transformed into commercial advertising messages.
HATCH GOOD IDEAS

Time: 3-4 hours Number: 2-7 people

New ideas can form when we let a thought run its course without interruption, especially if everyone in the group pitches in to combine and improve one another’s ideas. This method is based on other methods used to generate lots of ideas in a short period of time. But instead of following the rule to avoid all forms of criticism towards the suggestions given, taking a critical perspective is the starting point of this method. Put simply: focus on ideas that challenge and criticize social inequality and gender inequality.

This method is used to generate a large number of norm-creative ideas.

- Define the theme of your brainstorming session.
- Turn the theme into a question. For example, start with: How can we boost diversity in our projects?
- Reflect on a norm-critical issue with the question as your starting point.
- Write down ideas on sticky notes for 5 minutes. Aim for quantity over quality.
- Post the notes with ideas where everyone can see them.
- Combine and improve one another’s ideas by moving the notes around as you talk about them.
- Pose a new norm-critical question and repeat the procedure. Do this several times, until you start to run out of questions and ideas.
- Compile and evaluate the ideas by having everyone state one idea they find particularly provocative and that they would like to work with further.

SUGGESTION: Use the ♣ suit for support.
ROADBLOCKS AND RAMPS

When it comes to practical functions, examples abound of how people are defined and discriminated against based on, for example, gender, body differences and age. The consequences can be serious. Every day, people with disabilities face unnecessary obstacles in public settings. A building that cannot be entered with a wheelchair makes it impossible for some people to gain access. Dark public settings are hard to navigate for people with impaired vision. The building limits and impedes accessibility for people; it is the building that is a handicap.

Products also have this issue. Tools often require big hands and muscle strength, even though it is possible to make them lighter and smaller. Women are often prescribed medications that have only been tested on men, which can lead to serious adverse effects. Some automatic water taps do not respond to dark skin. Young girls’ development is limited and defined when their clothing lacks pockets in which to stuff pine cones and rocks. Until recently, car seats were modelled based on crash test dummies built to resemble male bodies, which led to a 100 per cent higher risk of whiplash injuries among women.

The functions of products, buildings and environments define what we can do and how we can move. For this reason, it is important to create solutions that maximise freedom for everyone.
ADD MORE LAYERS

Tid: ca 3 timmar  Antal: 2-7 personer

An intersectional perspective reveals how discriminatory categorisations are not isolated from one another. For example, women are not a homogeneous group. Women also have different experiences with discrimination depending on their skin colour, gender identity, sexual orientation and class, for example. In addition, social context influences power structures. Adding layer after layer can thus deepen the norm-creative innovation process.

This method is a tool to investigate the ways in which various discriminatory power structures interact.

- Prepare study materials, such as an image, product category or a customer group.
- Choose a categorisation, for example, sex.
- Examine representations of the group being studied – both in numbers and how they are portrayed.
- Summarise the patterns that emerge.
- Continue the analysis by adding another layer. Use the grounds of discrimination as a starting point (but note that other categorisations, such as class, are also crucial). Regardless of your choice, define what is insinuated. For example, if you start with discrimination based on ethnicity, is it about racialisation processes, skin colour, migrant background, hair colour, national identity, citizenship, traditions, cultural norms? Categorisations can be carried out in many different ways and vary depending on who is defining them.
- Add another layer by using more categorisations and see what patterns emerge. Go through the grounds of discrimination, layer by layer.
- Discuss and draw conclusions about how the exercise challenges assumptions and what that means for the process moving forward.

SUGGESTION: Use the ♠ suit for support.
THE LEVER BAR

Discrimination results in the needs and interests of certain groups becoming secondary. Creating equality with fair representation among different groups can require positive special treatment, i.e. by pointing something out and specially favouring it – with the tactic the Lever Bar.

Engineer reverse privileges. Discrimination is based on the fact that some groups are given privileges and advantages relative to other groups. Solutions that create a better balance may therefore be needed, for example by giving specific advantages to people who are usually discriminated against – as in golf, where players are given different handicaps to compete with one another on essentially equal terms.

Recognise what has been made invisible. Whether it is a nation, organisation or family, the history of oppressed groups is suppressed. But the stories are there if we look for them, and they can be used to correct history.

Elevate what has been devalued. It is not only groups of people who have different statuses. This also applies to colours, shapes and other forms of expression. But status is not written in stone. For example, traditional Swedish ‘falu red’ cottages with white trim were once painted to emulate the appearance of expensive red brick. But today, the colour has cultural value in and of itself. Everything can be renegotiated and upgraded.

Keep in mind to create solutions that genuinely change the power relationship. Social contexts based on some kind of required participation do not establish an environment of equality, nor do short projects financed with time-limited funds.
INTRODUCTION

A cup may seem banal. What could it have to do with innovation? We say: everything. It is one of the first objects that people produced and it is still developed and changed today.

A cup may be made from the thinnest plastic or the most expensive gold. Its form can be endlessly varied, from purely utilitarian to highly ornate. It is used at Nobel Banquets and on street corners to appeal to fellow citizens. It can indicate everything from status and class to humour and irony. Every cup also has its own history. Some carry memories that only we know. The cup smashed in a rage and then repaired. Or the cup that reminds you of a friend.

We have chosen the cup as an object for experimentation. With a wide variety of pictures of cups, it is possible to investigate and discuss how norms and values relate to colour, form, function and ritual. The cards can be used in different ways. They can be taken out for inspiration when we are stuck. Or they can help us express what we really mean when we are having a hard time formulating an idea with words. We designed the material to be like a puzzle that can be used to experiment with form. Together, we may be able to create designs and forms that we have never seen before.

May we offer you a cup?