

Visions on Handball

PD. Dr. Rolf Brack

Julian Bauer

Universität Stuttgart

Pestalozzistr.89

**Institut für Sport- und Bewegungs -
wissenschaft Stuttgart**

40549 Düsseldorf

Efficiency of numerical superiority and inferiority as a future indicator of success in handball

World class level sport events such as European championships, world championships or the Olympic games have traditionally been considered as being indicative of novel trends of a sport. Qualitative analyses of the 2008 men U20 European championships, the 2008 European men championships, the 2009 men World championships, as well as the 2010 European men championships revealed only minor differences in the efficiency of the standard 6:6 offensive success ranging approximately from 50% to 60% for most teams. Additionally, only few significant tactical innovations have been identified besides combined and more flexible defensive systems.

Taking into consideration that most teams nowadays rely on **similar tactical moves and defensive strategies** one could argue that an assimilation of playing styles and strategies has taken place in which **individual skills and abilities** to make the right decisions within these systems have become the main determiner of the question who ultimately wins or loses the game. This trend can be affirmed by the observation that even those teams which have been considered exotic in their way of playing in defense such as the North African teams of Egypt or Morocco who have been famous for their fast and offensive play in the late 90`s, have now internalized a more defensive playing style with accompanying traditional offensive actions.

Ultimately, the observation is that most teams on World Class level rely on 6:0, 5:1 as well as 3:2:1 defensive strategies with more or less offensive character and the traditional 3:3 offensive playing structure with similar efficiencies of success ranging roughly from 50-60%. This finding raises the question that if tactical innovations in playing situations in numerical equality (6:6 players) are rather exhausted, and whether **numerical inferiority or superiority situations** 6:5, 5:6, 6:4 court players and so on) **will make the difference** in games of teams of similar quality in the future.

In this context, the question comes up if one of the most current trends towards a higher game speed and **more fast breaks and fast throw-offs is significantly more successful** because the **defense is encountered in an unstructured way** compared to the traditional 6 against 6 court players. Or whether this trend can also be considered as a trend towards a higher importance in **achieving numerical superiority situations** as a lot of fast breaks and fast throw offs end up in 1:0, 3:2, 6:5... majority situations.

An analysis of the German elite division teams in 2008/2009, Tusem Essen, GWD Minden and HBW Balingen-Weilstetten revealed that in total the teams were **more successful in offense when they replaced their goal keepers** for an additional court player in offense and changed back as soon as their attack was over. However, this increase in efficiency was not significant due to the rather small sample size. Still, a clear trend towards an improvement of offensive efficiency was seen when 7 court players were attacking against 6 defenders. This artificial numerical superiority which due to the risk of getting an empty net goal has traditionally been used only in the final moments of a narrow game.

However, recently and being aware of the big difference in attacking efficiency of numerical inferiority (5:6), a number of teams even on World class level such as the Croatian men's team and the Norwegian women's replaced their goal keepers for an additional court player during 2-min suspensions, to at least achieve a numerical equality of court players. This possibility of achieving this kind of artificial numerical superiority (7:6 or coming up a 2-min

suspension by playing 6:6) is of high value as it is theoretically possible over the whole range of a game.

Also in **defense, tactical options in numerical superiority or inferiority** might be a determining factor in the future. In inferiority, the defense is put in to typical 1:2 defensive actions in which anticipation and tactical perception should change the typical action-reaction patterns, the other way around. As most teams also in 6:5, or 6:4 situations rely on tactical moves, the implementation of an aggressive and anticipative 4:1 defense might lead the offensive majority team into unforeseen situations which can not be solved by their standardized playing patterns.

However, especially in **defensive power play situations**, that is 6:5 or 6:4, a **lot of potential for tactical progression** seems to be present. A lot of teams change their defensive strategy into more offensive line-up with man marking of one player or a general more offensive character. Still, the typical pattern of the offensive team in numerical inferiority of being able to show long attacks is seldom effectively disturbed. A typical 2-min suspension with an attack of each team lasting approximately 30 secs leads to 2 offensive actions and 2 defensive actions of the team in numerical superiority. However, the implementation of a man to man-marking with a libero or sweeper as used by the Egyptian men national team in the late 90's decreases the time a team plays in 5:6 offense as typically the ball is lost after few passes or one player is able to break through. This decrease of time a team in numerical inferiority is able to play in offense, leads to the favorable consequence that more attacks in offense and in defense can be played with the team with one man up.

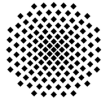
Summary

Most team tactics in 6:6 play resemble each other in top level handball in offense as well as in defense. Efficiencies in offense typically range from 50-60%. However, efficiencies with one man up or one man down in defense often show significantly higher (in superiority) or significantly lower quotes (in inferiority) than the aforementioned 50-60%. The **inclusion of an additional court player** or the **equalization of court players during a 2-min suspension** can clearly increase the efficiency of attacking beyond this value.

In defense a high level of **anticipation in 1:2 situations (inferiority)** as well as a complete **man to man marking (superiority)** can clearly **increase efficiency in defensive actions**.

However, admittedly all of these actions despite their extreme contributions in a potential improvement of the game's result can rarely be seen in top class handball nowadays. Due to the relative assimilation of team tactics in offense and defensive play as well as the relative risk associated with these tactical decisions, in these fields **a clear potential for further improvement** is present.

As a **consequence for the training process**, a team trying to distinguish itself from the typical tactical patterns and trying to be more effective should spent **high training loads for** these tactical situations which might be encountered much more often as a future trend in handball.



Visions for a successful future of Handball

game, training, coaches, players, team, general structures

Game Philosophy

more speed and variability in offense and defense

Exercise-, Training- and Coaching Philosophy

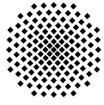
more integration of muscles and mind

Coaches-, Players- and Team Philosophy

more coaching experts, allround players and teams

General Structures in the fields of Handball

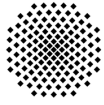
more professionalization, more commercialization and internationalization



Game Philosophy

“high-speed and more variability in offense and defense“

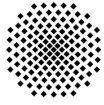
- Good mixture of free play and set play
- Good mixture of divergent (creativity) and convergent (intelligence) decisions
- Innovative systems in offense (e.g. two pivots against wing, three pivots + backplayer, playing 7:6 without goalkeeper – compare illustration 1)
- More attractive goal actions, “playing in the third dimension“
- Innovative systems in defense (e.g. variations of defensive formations with more antizipaton, steals, offensive fouls, “help the helper“, ...)
- Innovative systems in the transition game
- Computer supported video feedback + game analysis
- Computer-based statistics during the game
- 14 fieldplayers + 2 goal keepers → more substitution



Excercise, Training and Coaching Philosophy

“more integration of muscles and mind“

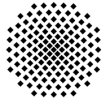
- Optimized and preventive speed, coordination and strength training (core-training, sensorimotor training (SMT), free weights, HIT = high intensity training in strength and endurance)
- Team tactic as a help for “simple“ intelligent decisions and actions (compare illustration 2)
- Individual tactic as a help for “difficult“ and creative decisions and actions (compare illustration 2)
- More psychological training (life kinetics, mental training, video feedback (compare illustration 3)



Coaches-, Players- and Team-Philosophy

“more coaching experts, allround players and teams“

- Headcoach / Teammanager = expert with holistic know-how, leadership, innovative readiness – change management, lifelong learning, ...
(illustration 4)
- Several assistant coaches = specialists with analytical “know-that“ about body and mind
- Players = allrounder, perfect athlete, team player, self motivated
(illustration 5)
- Teams = synergetic self organisation, knowing the rules for a good team performance (illustration 6)

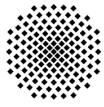


General Structures in the fields of Handball

**more professionalization, commercialization and
internationalization**

- Associations (national & international), EHF = model for development of handball all over the world (USA, commonwealth, ...)
- Better education of coaches = academic level (illustration 7 + 8)
- Better education of referees, “better” rules for the game
- Better marketing and controlling
- Better systems of talentscouting and especially recruiting

**More professional management for a higher attractivity and
public interest in handball all over the world!!!**



1. Übergang 6:6 aus 3:3 in 4:2

- a) Doppelpasses gegen Außen rechts. Zuerst LA mit KL (LA geht als zweiter KL zwischen Abwehrpositionen 5 u. 6) dann RLA mit KL
- b) 2 breite KL (zw. 1,2 und 5,6) weiterspielen mit Sperren

2. Übergang 6:6 aus 4:2 in Spiel mit 3 KL

- a) Mismatch aus 4:2 gegen AR + Übergang als 3. KL
- b) Weiterspielen mit Grundprinzip Indirektes Sperren + breites Stoßen auf Lücke

3. Spiel ÜZ 7:6 (2 KL)

- a) Standard = RL Pass an breiten KL oder abräumen nach rechts
- b) Wenn keine Überzahl rechts zum abräumen → Rückstoßen mit abräumen nach links

4. Spiel Überzahl 7:6 (3 KL)

- a) Grundprinzip: Indirektes Sperren + breites Stoßen auf Lücke

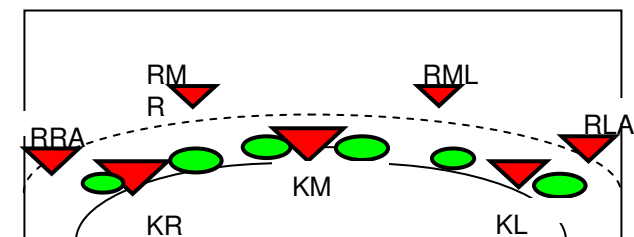
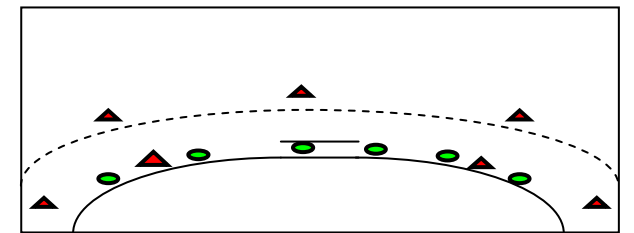
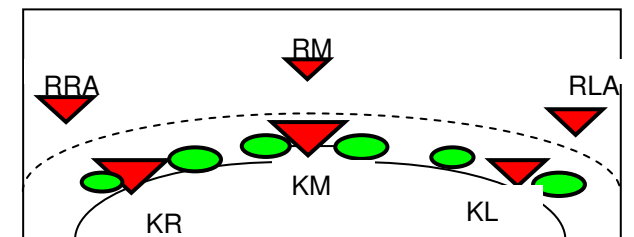
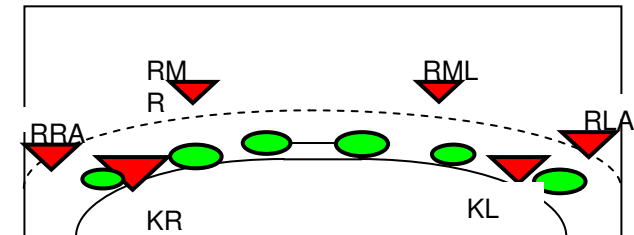
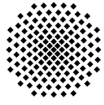


Illustration 1



Info 3: Ziele, Inhalte und Methoden des Taktiktrainings

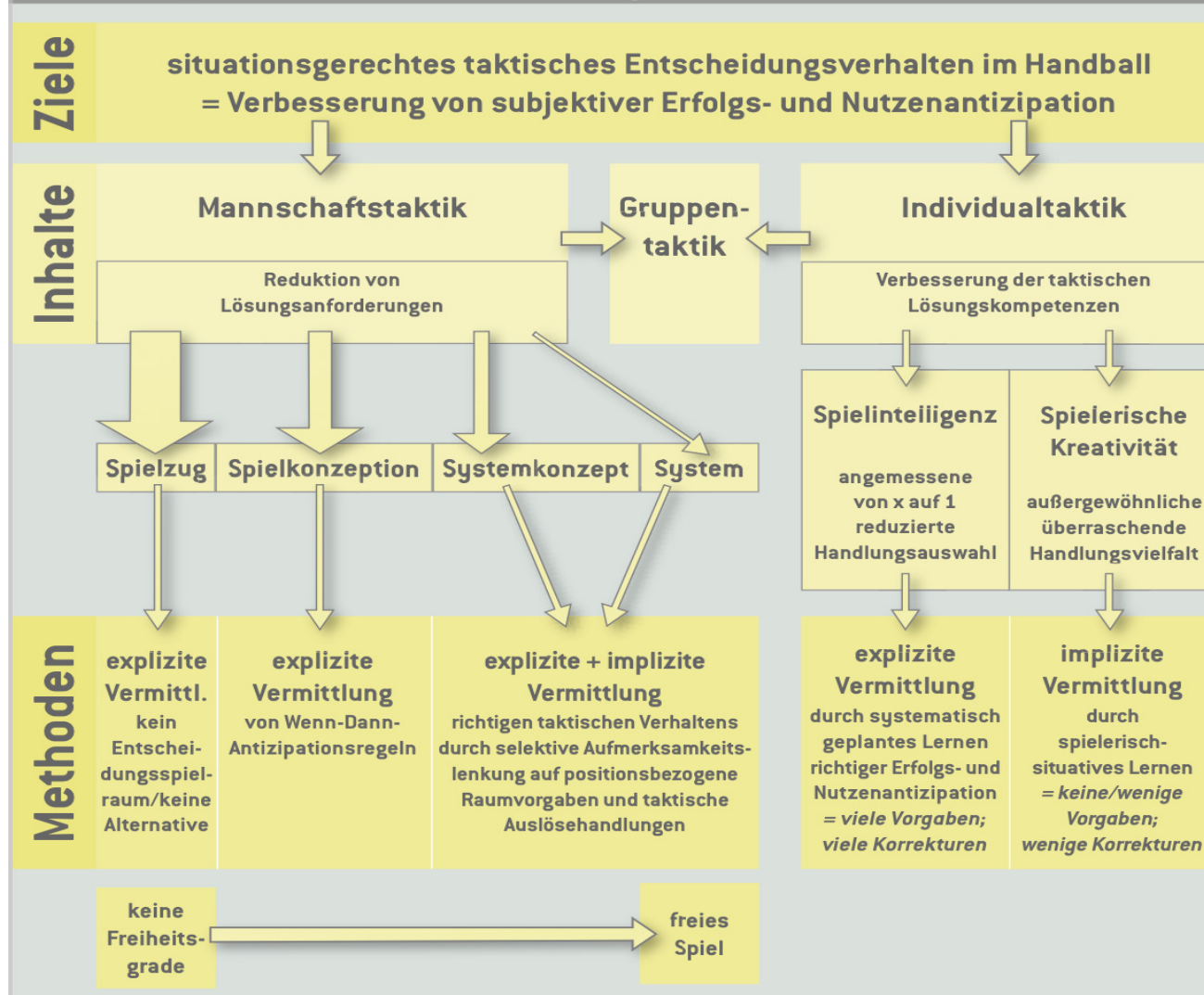


Illustration 2

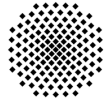
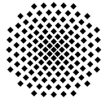


Illustration 3



Formel des Erfolges

Innovative + erfahrene Trainermanager

=

Können (Fachliches Know-How)

+

Führen (Menschen begeistern /
Teams formen)

+

aus Resultaten lernen und verändern

Illustration 4

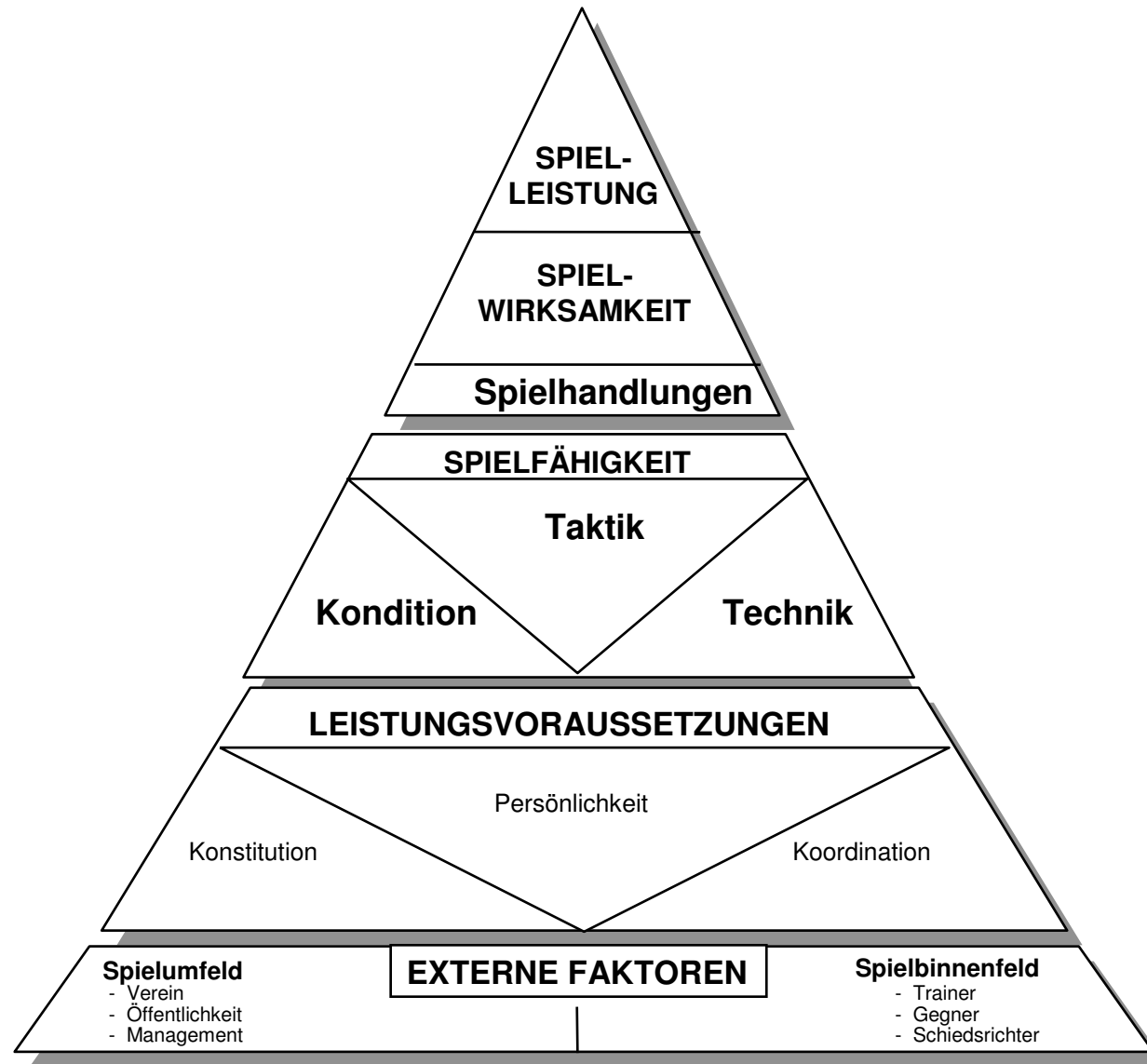
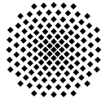


Illustration 5



Die zehn HBW-Gebote für die MISSION PLATZ 15 in der Saison 2010/11



Wir sind uns der Stärke unserer Abstiegs Konkurrenten bewusst. Die realistische, objektive Erfolgswahrscheinlichkeit für die Zielerreichung PLATZ 15 liegt bei 50%-x!!! Um mit 50%+x den direkten Klassenerhalt zu schaffen, müssen wir unsere Stärken TAKTIK und TEAM fokussieren und über die gesamte Saison anhand der folgenden Gebote weiterentwickeln.

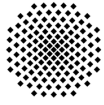
TAKTIK-Gebote:

1. Wir müssen unser 3:2:1-Abwehr als Standard-TAKTIK perfektionieren (1-gegen-1, Helfen, Verhalten gegen 2 KL). Wir müssen Varianten der 5:1-Abwehr als Alternativ-TAKTIK sowie der 4:2-Abwehr als Überraschungs-TAKTIK entwickeln.
2. Die Quoten im Tempospiel bezüglich Konter und Rückzug sind absolut spielentscheidend. Deshalb brauchen wir eine Konter-TAKTIK mit 10+x eigenen Toren und eine Rückzugs-TAKTIK mit 10-x gegnerischen Toren als absolute Quoten. Dies führt zu einem positiven Verhältnis von eigenen zu gegnerischen Kontertoren als relative Quote.
3. Die TAKTIK im Angriff muss allen helfen, das vorhandene individuelle Potenzial bezüglich maximaler Dynamik und situationsgerechtem Entscheidungsverhalten auszuschöpfen.
4. Die Systemkonzepte 1, 2, 3 und 6 (evtl. 10?) sind geplante Auslösehandlungen mit vielen Entscheidungsspielräumen. Sie dienen dazu, die gruppen-TAKTISCHEN Elemente Stoßen/Rückstoßen/1-gegen-1, Sperren, Übergang und Kreuzen durch ständiges Trainieren in der Kleingruppe im Spiel perfekt und kreativ umzusetzen.
5. Die Angriffskonzeptionen in GZ, ÜZ, UZ haben weniger Entscheidungsspielräume. Sie dienen dazu, die finale Abschlusssituation eindeutiger bezüglich der Ball- und Laufwege festzulegen, um damit die Erfolgswahrscheinlichkeit einer taktisch intelligenten (=richtigen) Entscheidung im Knotenpunkt (Torwurf oder Abspiel) der Konzeption zu erhöhen.

TEAM-Gebote:

6. Jeder arbeitet jeden Tag an seiner persönlichen Erhaltung und Entwicklung von Gesundheit und Leistungsfähigkeit für sich und das TEAM! „Wer aufgehört hat, besser werden zu wollen, hat aufgehört, gut zu sein!“
7. Jeder ist wichtig für das TEAM. Die Wertschätzung des Trainers äußert sich in Lob und harter, aber fairer Kritik.
8. Jeder, der weder sich noch das TEAM maximal fördert und fordert, betrügt nicht nur sich selbst, sondern auch alle anderen. WIR MÜSSEN MENSCHLICH UND SPORTLICH UNSER BESTES GEBEN.
9. WIR HABEN MEHR HUNGER NACH ERFOLG UND MEHR WILLE ZUM SIEG ALS UNSERE GEGNER.
10. WIR MÜSSEN MIT VERTRAUEN UND SELBSTDISZIPLIN DEN SCHWEREN WEG AUF PLATZ 15 GEMEINSAM GEHEN.

„Handball Braucht Wille & Top Einstellung Als Maxime!“
(Wir brauchen immer 100%, um erfolgreich zu sein!)



Vom Novizen zum Experten

Experten haben ihr Wissen in seiner inhaltlichen Bedeutung besser (anders) organisiert als Novizen, was dieses zugänglicher, funktionaler und effizienter macht.

Trainernovize =
Wissen

Trainerkompetenz
= Handeln

Trainerexpertise =
Können

Spielerexperte =
erlebtes
Bauchwissen

Analytisches „
Know-that“

Ganzheitliches „
Know-how“

Implizites Wissen

Trainerausbildung
= erlerntes
Faktenwissen

Explizites Wissen

Intuitives =
heuristisches Wissen

Illustration 7

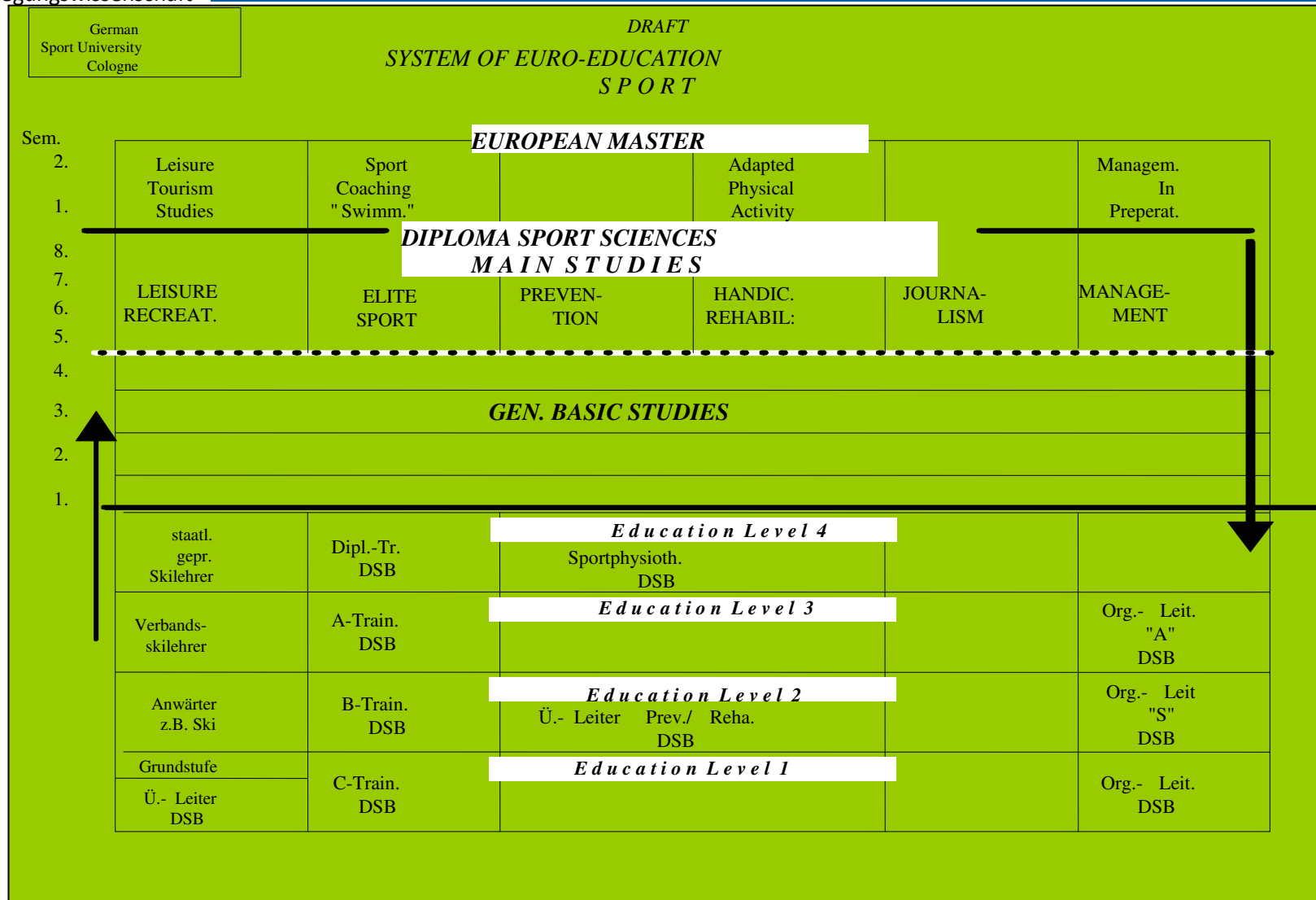
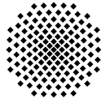


Illustration 8: Systematik von Berufen im Sport nach den Maßgaben der Europäischen Direktiven (MESTER 1995, 129)