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A NEW NETWORK FOR OPTIMIZING GUIDE DOG TRAINING

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High demands are made on guide dogs and their training: Guide dogs for the blind have to cope reliably with highest requirements in everyday life while the strain on dogs and man should be as small as possible. At the same time guide dog training is expected to be cost-effective.

In our workshop we presented a novel approach which opens new possibilities towards an animal-friendly, more effective and in the long run also more economic way of guide dog training!

The *Foundation Swiss School for Guide Dogs for the Blind* was established in 1972 and at present 25 full-time and 4 part-time employees work at the school. Approximately 30 guide dogs successfully finish their training per year and are introduced into their new task and to their human partner.

The novel approach was started in 1999 and is since then continuously tested, improved and further developed. New facilities were built between 1999 and 2003 and the novel approach was incorporated in parts of the new buildings. The innovations are designed and carried out in cooperation with „Kynologos“, a company for applied research in dog behavior.

The innovations are based on longtime practical experiences and are closely oriented towards current research in the behavioural sciences and psychology. They form a **closely and carefully coordinated network at different stages throughout a dogs' development** and are directly or indirectly linked to the training success of guide dogs. In this workshop we focused on 3 different stages during a guide dog's life: the puppyhood, the foster families and we also briefly mentioned innovations during the training period.

During puppyhood, especially in the first 12-16 weeks of life, fundamental and long-lasting learning processes take place. These include aspects of perception, psychomotor skills, social learning and the

development of coping strategies. Environmental challenges are hereby crucial for fundamental learning processes. Only if stimulating environmental conditions are present, can puppies learn and develop their skills properly. The initial conditions in a puppy's life determine their future development. As part of our network approach we use this period of highest learning capability to prime our puppies for their future tasks in a playful way. During the first 12 weeks of life, when the puppies are still at the school, we offer them **advanced rearing and developmental conditions** which enable the growing dogs to develop their genetic potential and thus exhibit their skills properly. We also **prime specific skills**, which are essential for the dog's later work as a guide dog. These include for instance senso- and psychomotor skill, the orientation towards height and the development of strategies to solve problems and to find alternative routes.

As a second step of the network approach we **improve the foster family system**. When the puppies are 12 weeks of age they are introduced into foster families where they stay until an age of 12-15 months. The time in the foster families is an important, but rather difficult period in a dog's life. The dogs get to know and can adapt to daily life in a family, but at the same time, they are parted from their social group and familiar environment and have to develop new bonds. In addition, the difficult time of puberty with several drastic changes concerning the hormonal status and the development of the brain and nervous system falls in that time period. Therefore, negative developments are frequent, although foster families are regularly and thoroughly advised. To improve the foster family system we enhance the families' knowledge on handling a foster puppy by offering new, broad and clearly structured guidelines. These guidelines are behavioral science oriented information and include topics concerning conditions for a good start, guidelines for the further development as well as practical information for the daily life with a puppy. The guidelines are accompanied by a comprehensive video (the guidelines and the video are available at the Swiss School for Guide Dogs in four languages: English, German, French and Italian). We also are establishing a continuous supervision and guidance of the dog's behavioral development during that time period. This is achieved by regularly monitoring the behavioral development of the dogs in the foster families, by rehearsing specific skills with the dogs at the school and by asking the foster families to participate with their dogs at so called „imprinting play days“. Imprinting play days are a behavioral school for dogs and their human companions which are lead by competent teachers explaining the behavior of the puppies. This supervision and guidance of the dog's behavioral development enables a continuous promotion of specific skills as well as the possibility to counteract negative developments at an early stage.

In addition we are on the way to **optimize the learning processes during the actual training period**, which starts when the dogs return to school at an age of 12-15 months. We do this by incorporating important and effective aspects of learning biology and brain research, which exceed the well-known methods of simple conditioning. We work, for example, with the emotional memory, use the dogs own impulse to successfully cope with challenging situations and prohibit the formation of incorrect mental association.

With our new network approach we obtain a more efficient training by applying new methods during the period of highest learning capability! Our preliminary results clearly show positive effects: Dogs which are raised according to the new program can be trained more easily during the training period later on, the training period can be reduced, the dogs show a higher coping ability and are therefore also expected to be “on duty” for a longer time. Our new program thus enables new and striking possibilities to enhance the development of guide dogs in an animal-friendly way!

We are constantly testing, improving and extending our program. An individual character description for each dog will soon be introduced, where specific behavioral characteristics are reviewed throughout a dog's life. This character description will also serve as a statistical data-base for evaluating the behavioral development of our guide dogs and to recognize interrelations and interplay between specific behavioral traits. In addition, we are on the way to consider and implement the importance of prenatal effects in our network approach.

To establish such a network, a specific knowledge, especially concerning many not obvious, but important details, has to be present. We plan to share our knowledge and experiences on the establishment of this network approach and the behavioral basis of dog behavior with you and plan to offer seminars in the near future. (Please contact the *Foundation Swiss School for Guide Dogs for the Blind* for further details: info@blindenhundeschule.ch).

We hope that this novel approach contributes to intensify our international cooperation towards a common goal!

