



eGadgets

are GAS compatible everyday objects with communication computing sensing intelligence

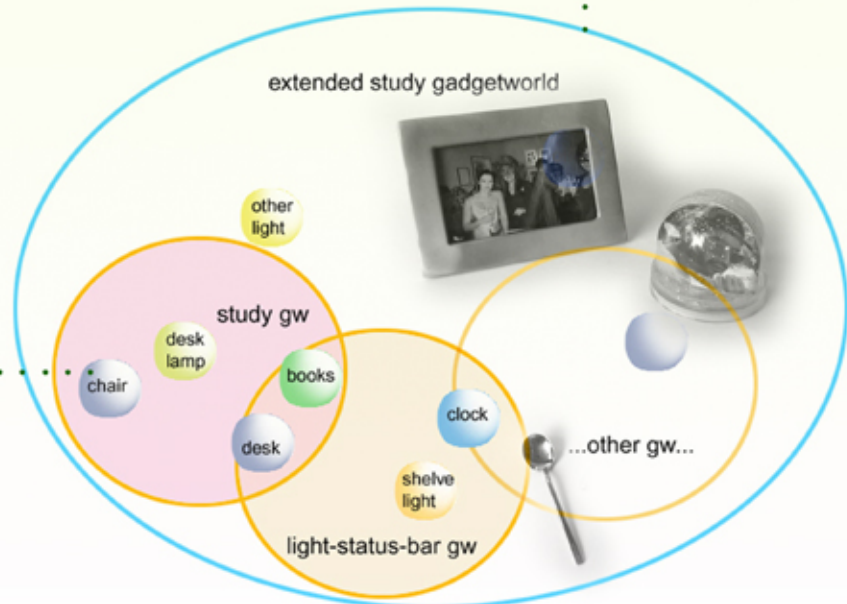


and have detachable dual nature: physical-digital



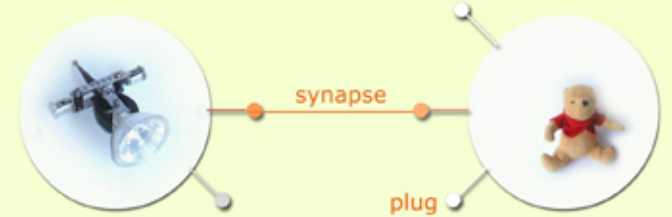
connectable in Gadgetworlds

which are functional clusters user composable dynamically evolving independent of specific technologies storable, portable entities



GAS is an underlying technology

Gadgetware Architectural Style



is

an abstraction of families of Gadgetworlds that share common architectural aspects

provides

the conceptual and technological framework for creating, "editing", "running", saving and restoring Gadgetworlds

defines

an architectural vocabulary: eGadget

Plug

Synapse

Gadgetworld

configurational rules for

Synapse establishment

Gadgetworld storage

Gadgetworld privacy

Gadgetworld mobility

a technological infrastructure

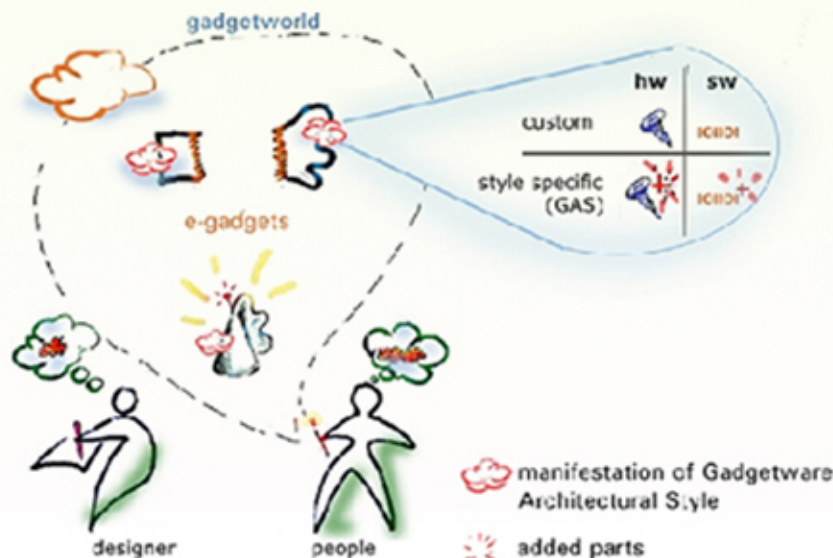
the GAS operating system:

algorithms,

protocols,

interfaces,

software modules

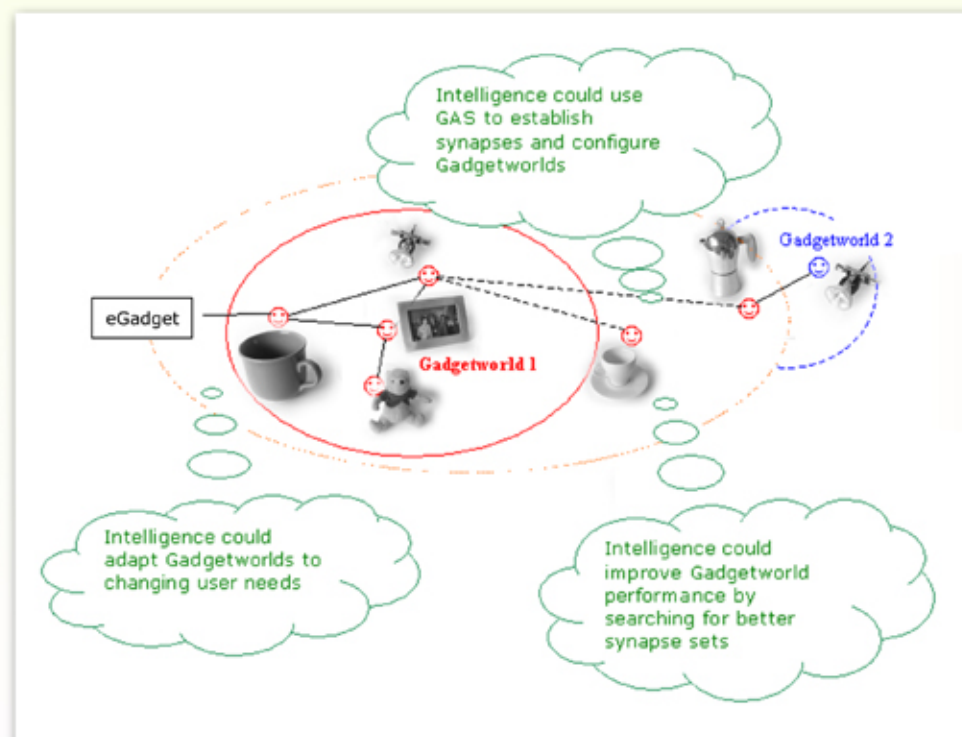


provides a means of "(re)programming" Gadgetworlds to meet diverse and changing user needs

contributes to improving the robustness of Gadgetworlds

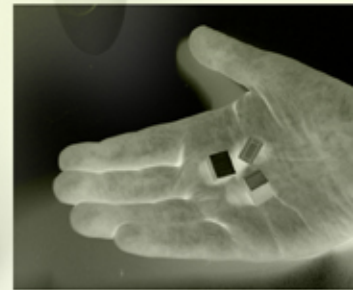
works by observing and learning from user actions (using agent methods borrowing from robotics)

operates within GAS framework

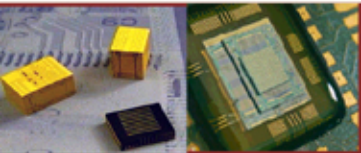




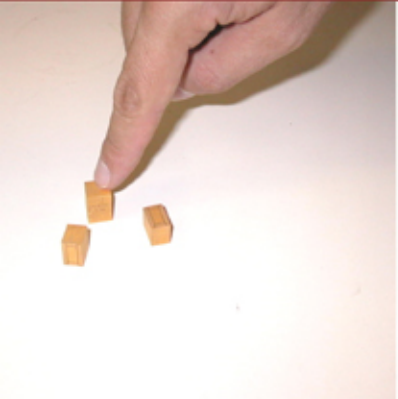
creative technology platforms
for embedding hardware electronics
into many types of everyday objects



miniturisation sensor networks gadget-system intergration eGadgets / Gadgetworld



- micro-sensor networks
- drivers / controllers
- wireless transceivers
- micro-processor
- memory
- power source



COMPUTING

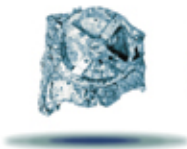
TANGIBLE

adapting the notion and principles of
software architecture to the world of tangible artefacts

gadgets=artefacts+communication+intelligence
gadgetworld= Σ (gadgets)+collective function

EGadgots

www.extrovert-gadgets.net



ITY ΙΝΣΤΙΤΟΥΤΟ ΤΕΧΝΟΛΟΓΙΑΣ ΥΠΟΛΟΓΙΣΤΩΝ
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University of Essex

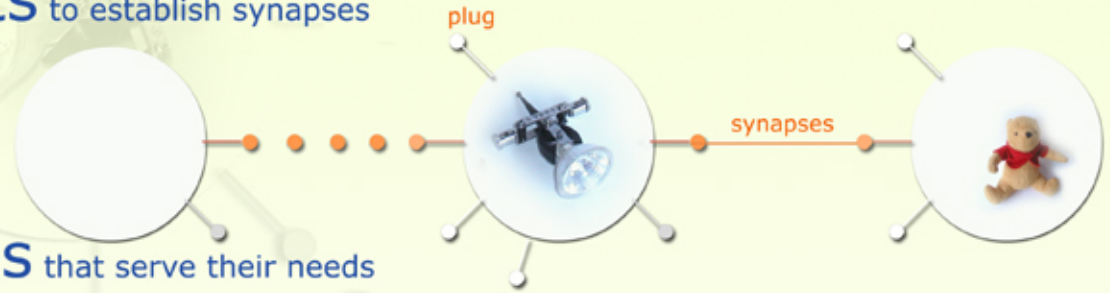


1. people set goals, in order to meet their needs & wants

2. they select eGadgets and think of their associations (conceive Gadgetworlds)

3. then people connect eGadgets to establish synapses

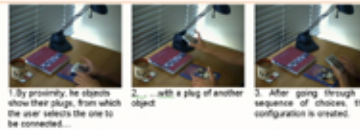
4. thus they form their Gadgetworlds that serve their needs




synapse establishment methods

no facilitator 

with facilitator 



portable gw editor 

single reactive agent

single deliberative agent

intelligence

multi-agent

sw component architectures

artifacts as components

component based distributed systems

GAS, Gadgetworlds

electronics embedded into objects

HDI
high density interconnect

microsensors

μ .electronics

past and present

future vision

